Power Door & Step

PowerDoorAndStep.com

888.928.8000

V363 *Ford* **TRANSIT**

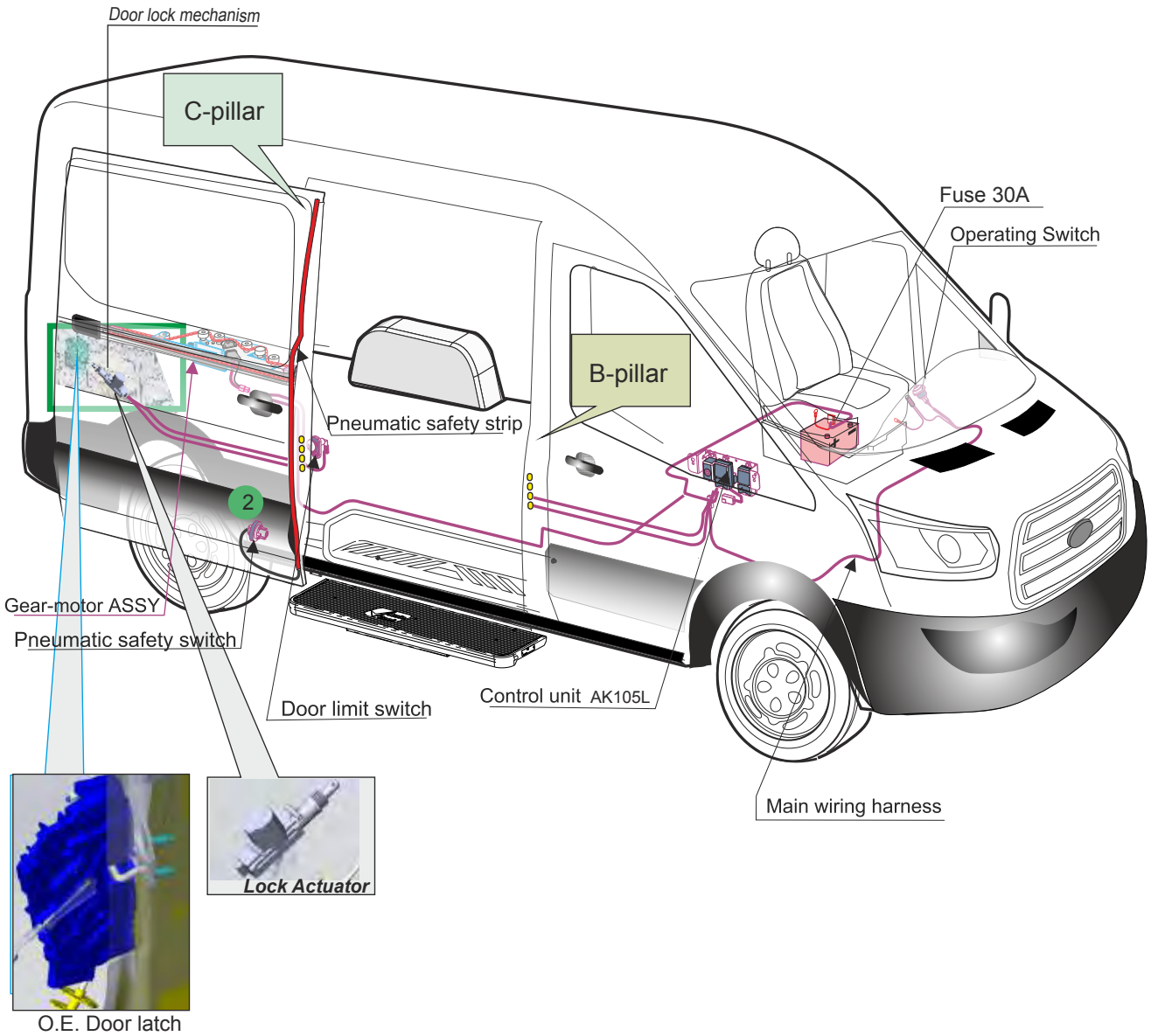
RWD/*FWD*

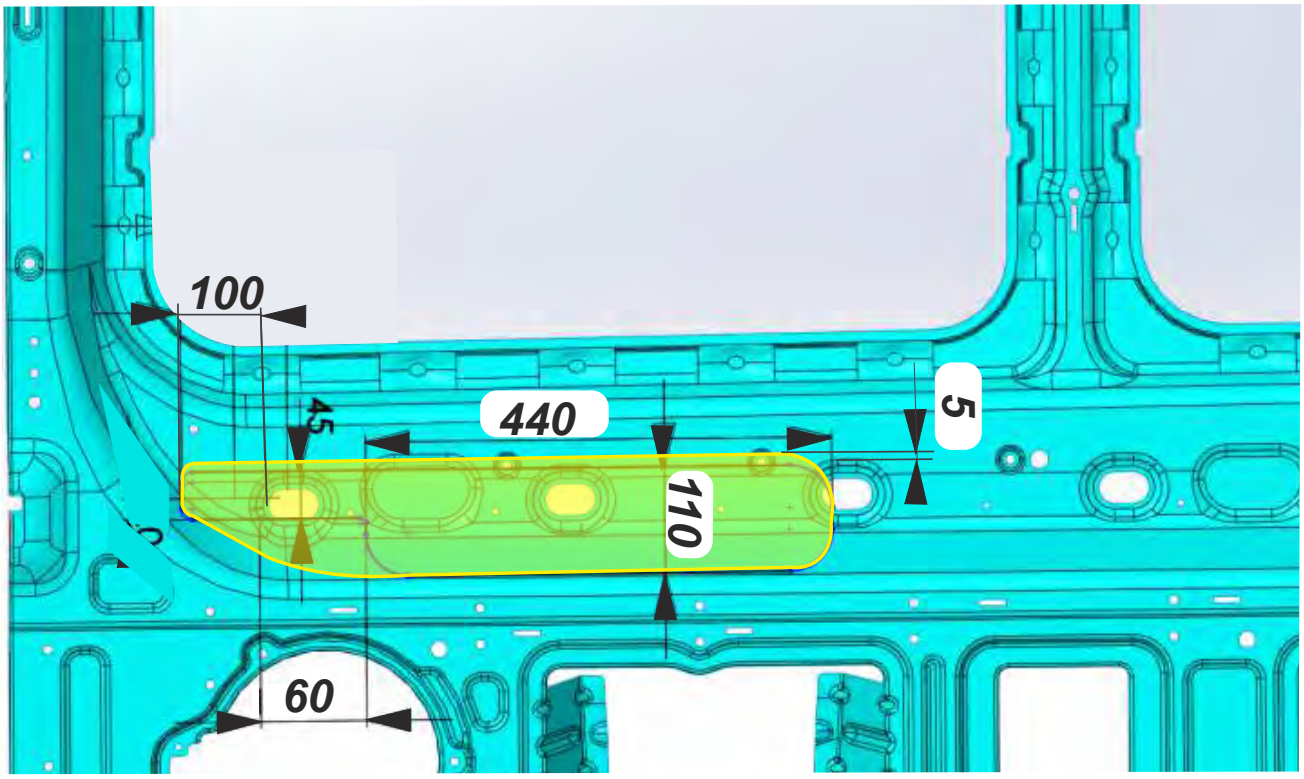
Long Wheel Base ,Jumbo

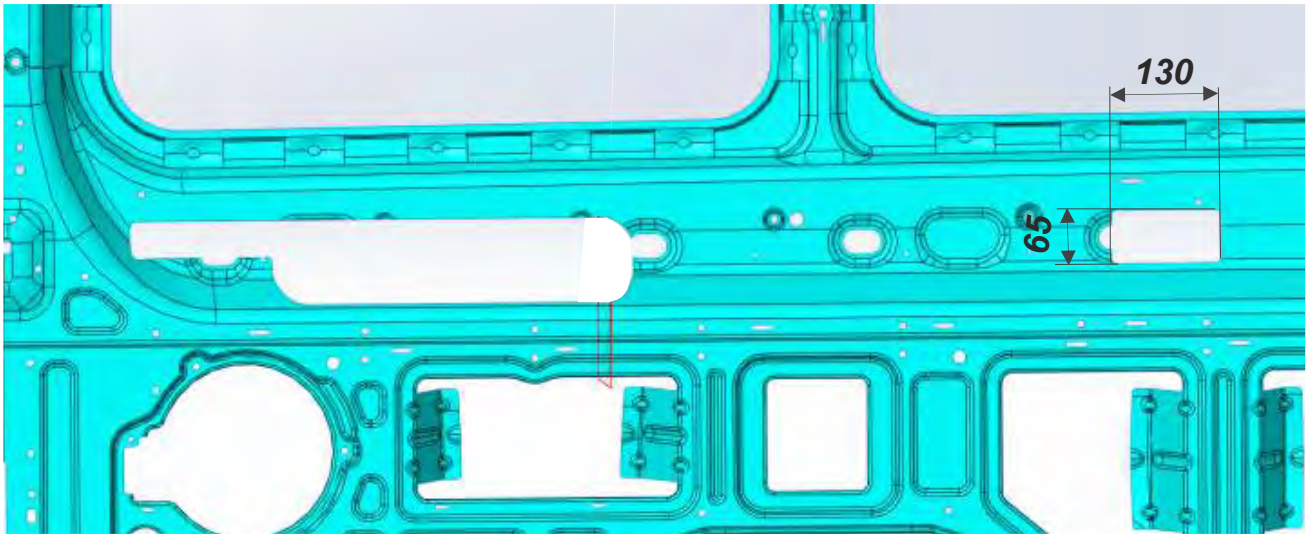
Automatic Sliding Door Set

PN: 015-3631-DL

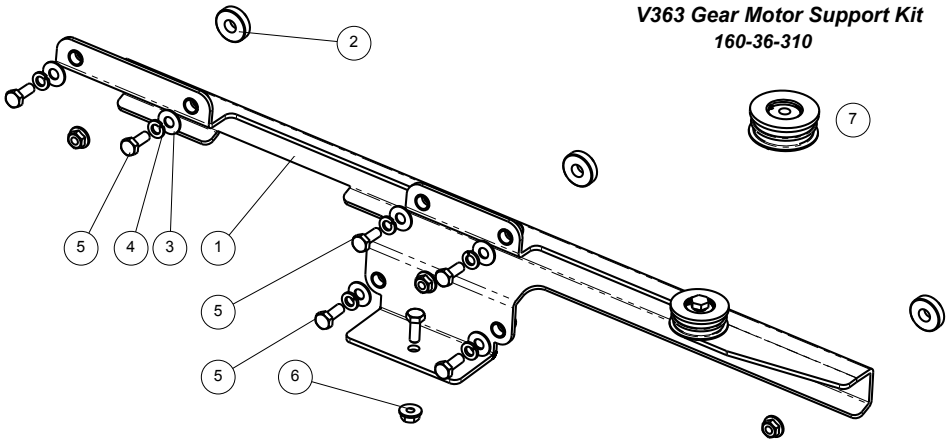
Original Door latch mechanism
& operation with handles


Door lock mechanism
C-pillar
Fuse 30A
Operating Switch
B-pillar
Pneumatic safety strip
2
Gear-motor ASSY
Pneumatic safety switch
Door limit switch
Control unit AK105L
Main wiring harness
Lock Actuator
O.E. Door latch

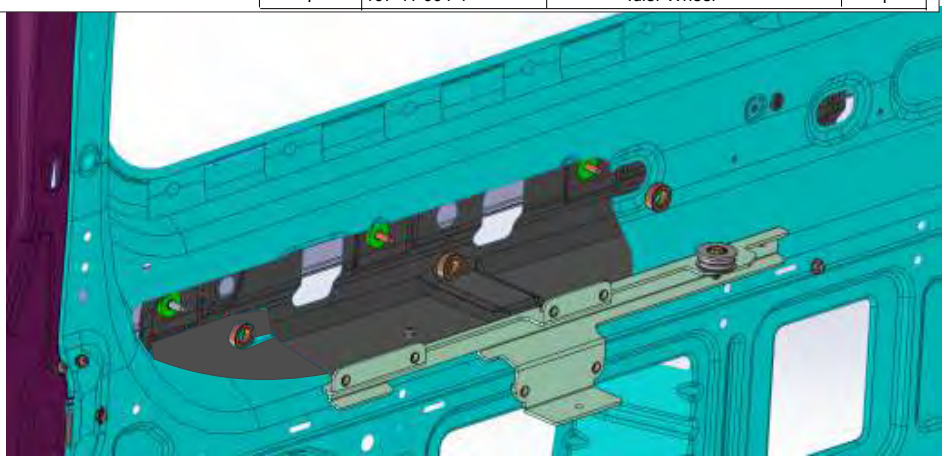

100
45
440
110
5
60

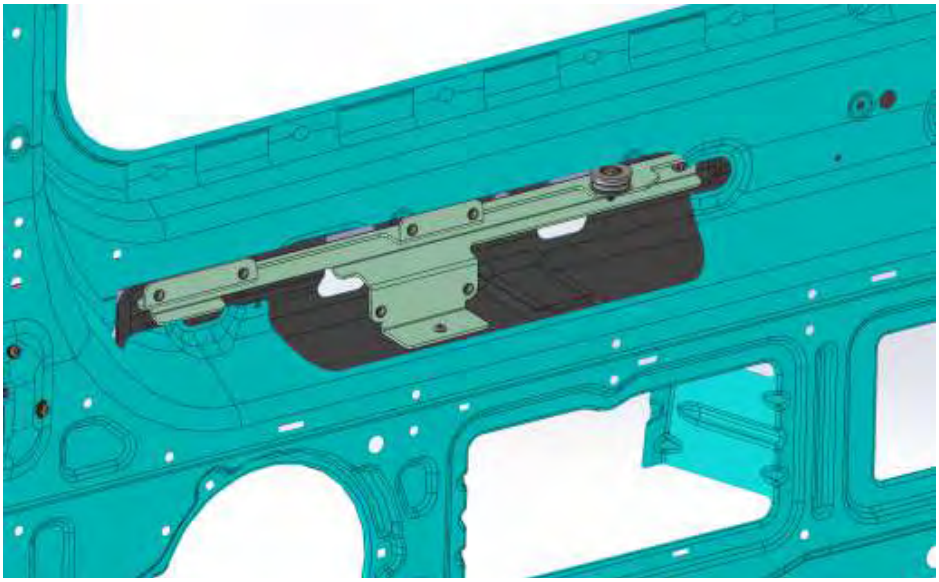

130
65

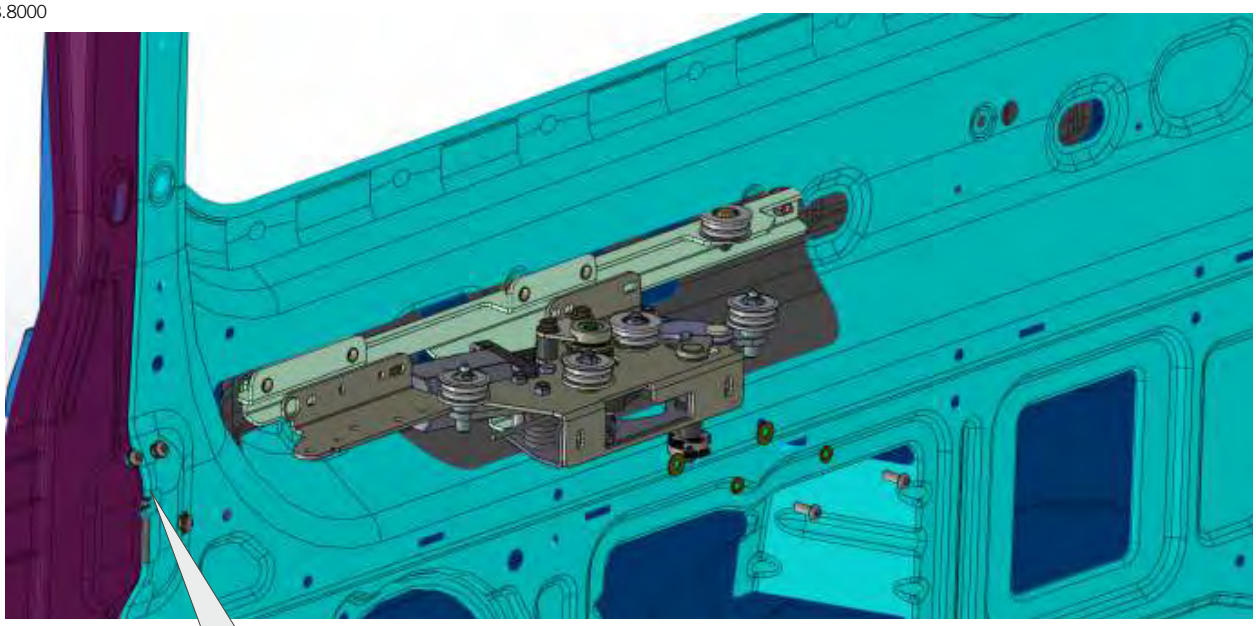
V363 Gear Motor Support Kit
160-36-310

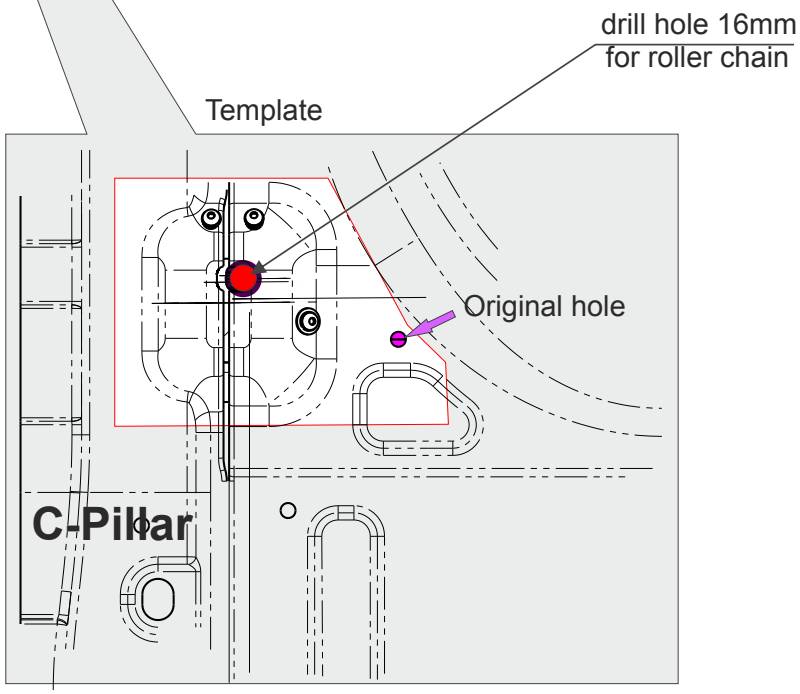


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	111-36-310	V363 Gear Motor Support Right side	1
2	501-17-006	22x8.5x6 Spacer	3
3	600-12-080	Flat washer M6,thin DIN735	6
4	600-04-052	Spring Washer 6	6
5	632-06-016	Hex cap screw M6x15	7
6	601-06-006	Hex flange nut M6 DIN 6923	4
7	107-11-004-1	Idler Wheel	1

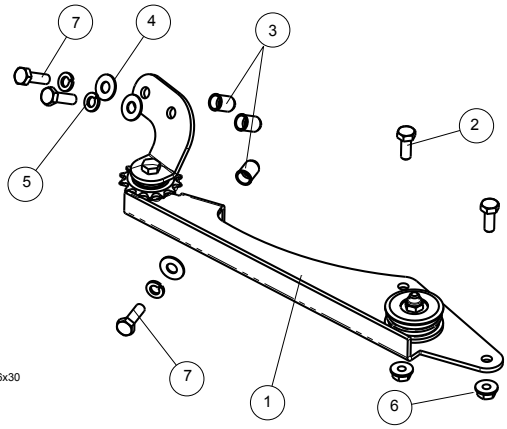




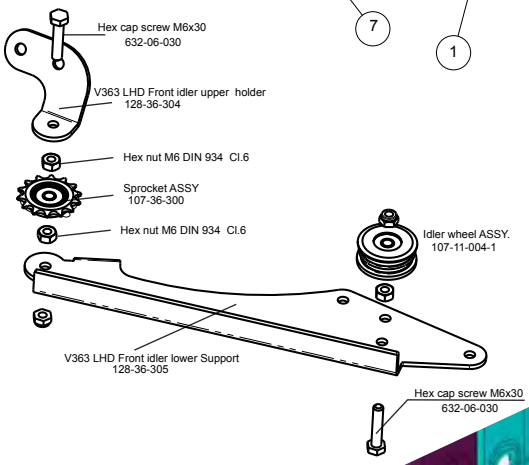


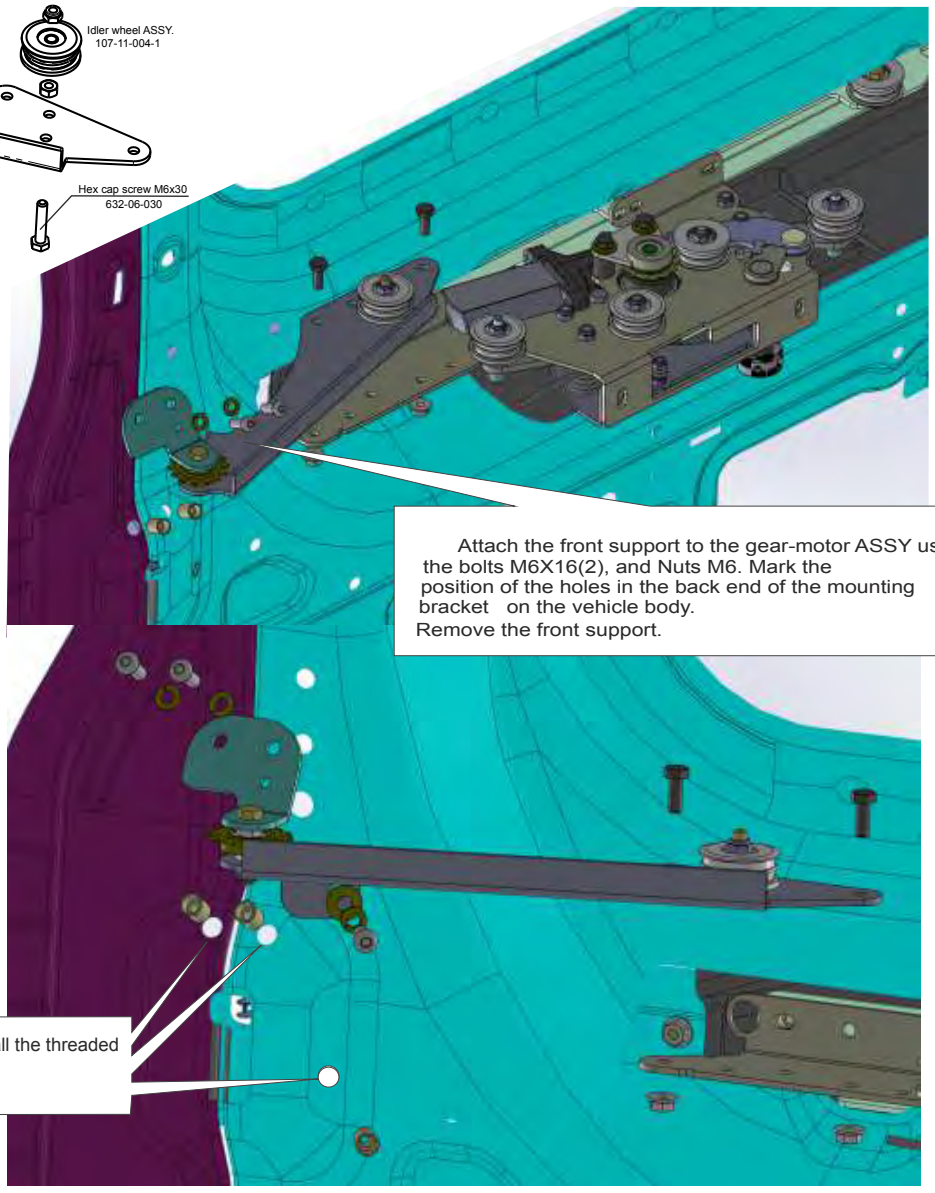

drill hole 16mm
for roller chain
Template
Original hole
C-Pillar

V363 Front Idler Kit
160-36-320



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	111-36-330	V363 Front Idler Kit	1
2	632-06-016	Hex cap screw M6x15	2
3	603-02-006	Rivet nut M6	3
4	600-12-080	Flat washer M6,thin DIN735	3
5	600-04-052	Spring Washer 6	3
6	601-06-006	Hex flange nut M6 DIN 6923	2
7	632-06-020	Hex bolt M6x20 DIN933, 8.8	3

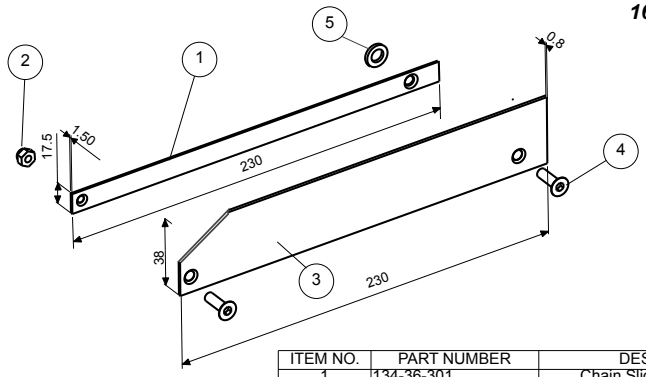




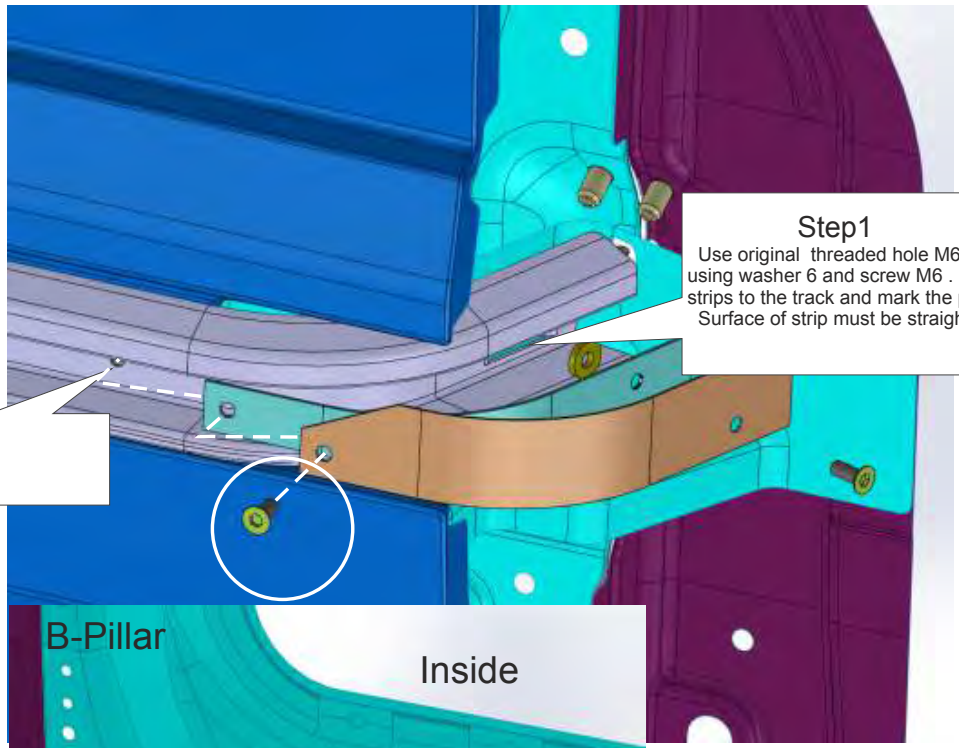
Attach the front support to the gear-motor ASSY using the bolts M6X16(2), and Nuts M6. Mark the position of the holes in the back end of the mounting bracket on the vehicle body.
Remove the front support.

Drill 3 holes 9.5mm and install the threaded inserts (QTY. 3)

Chain Slide Strip Kit
160-36-330

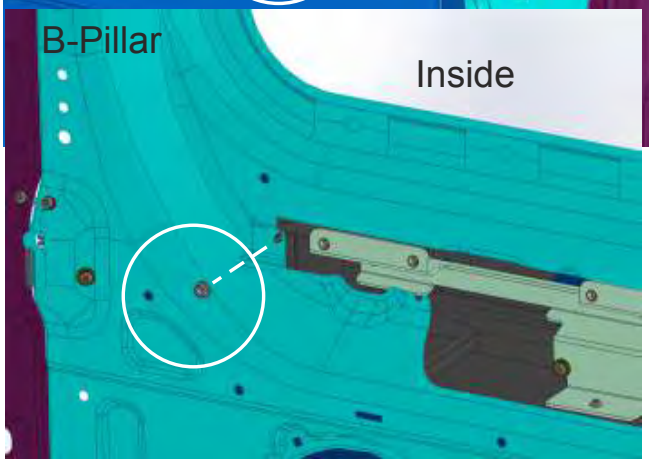


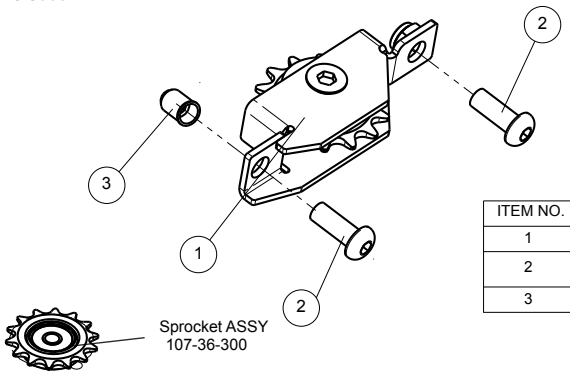
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	134-36-301	Chain Slide Strip (Transit)	1
2	601-06-006	Hex flange Nut M6	1
3	134-36-302	Chain Slide Strip front (Transit)	1
4	613-06-020	Socket flat head screw M6X20	2
5		Washer 6	1



Step1
Use original threaded hole M6, fasten slip strips using washer 6 and screw M6 . Press firmly both slip strips to the track and mark the position for hole . Surface of strip must be straight without waves.

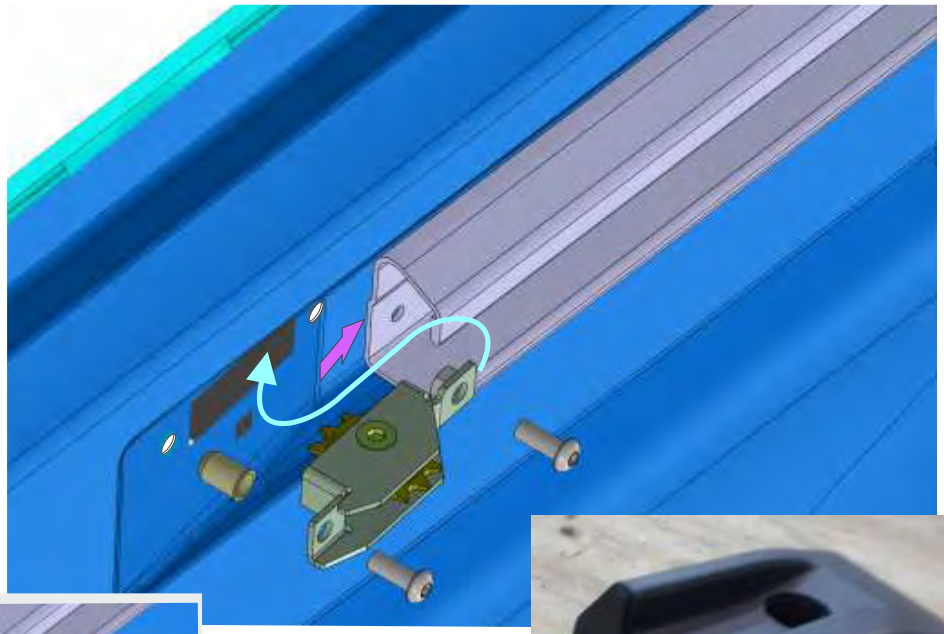
Step2
drill

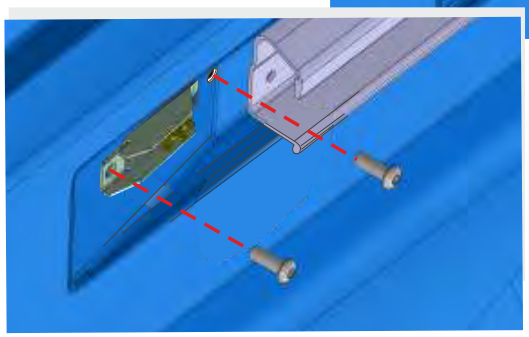


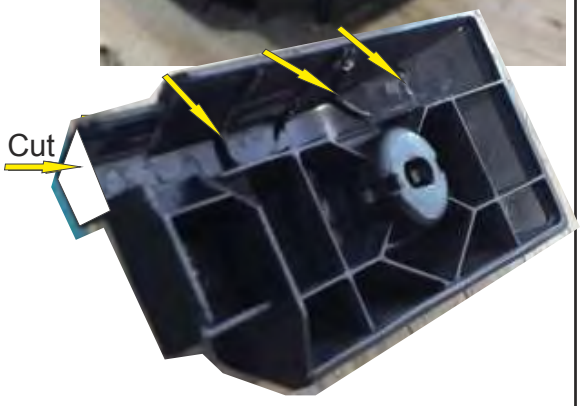


Rear Idler Kit
160-36-340

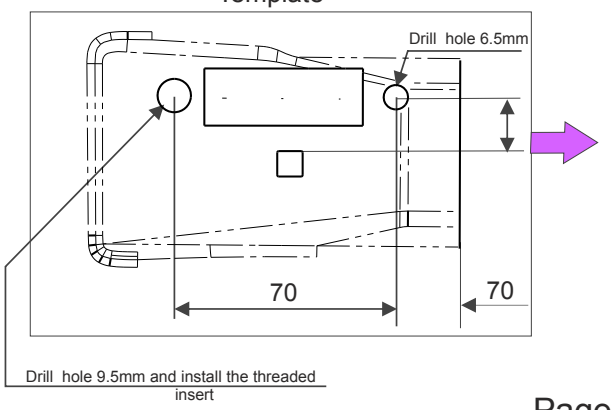
ITEM NO.	PART NUMBER	DESCRIPTION	Exploded/QTY.
1	111-02-013-1	Rear idler	1
2	614-06-016	Socket button head cap screw M6X16	2
3	603-02-006	Rivet nut M6	1

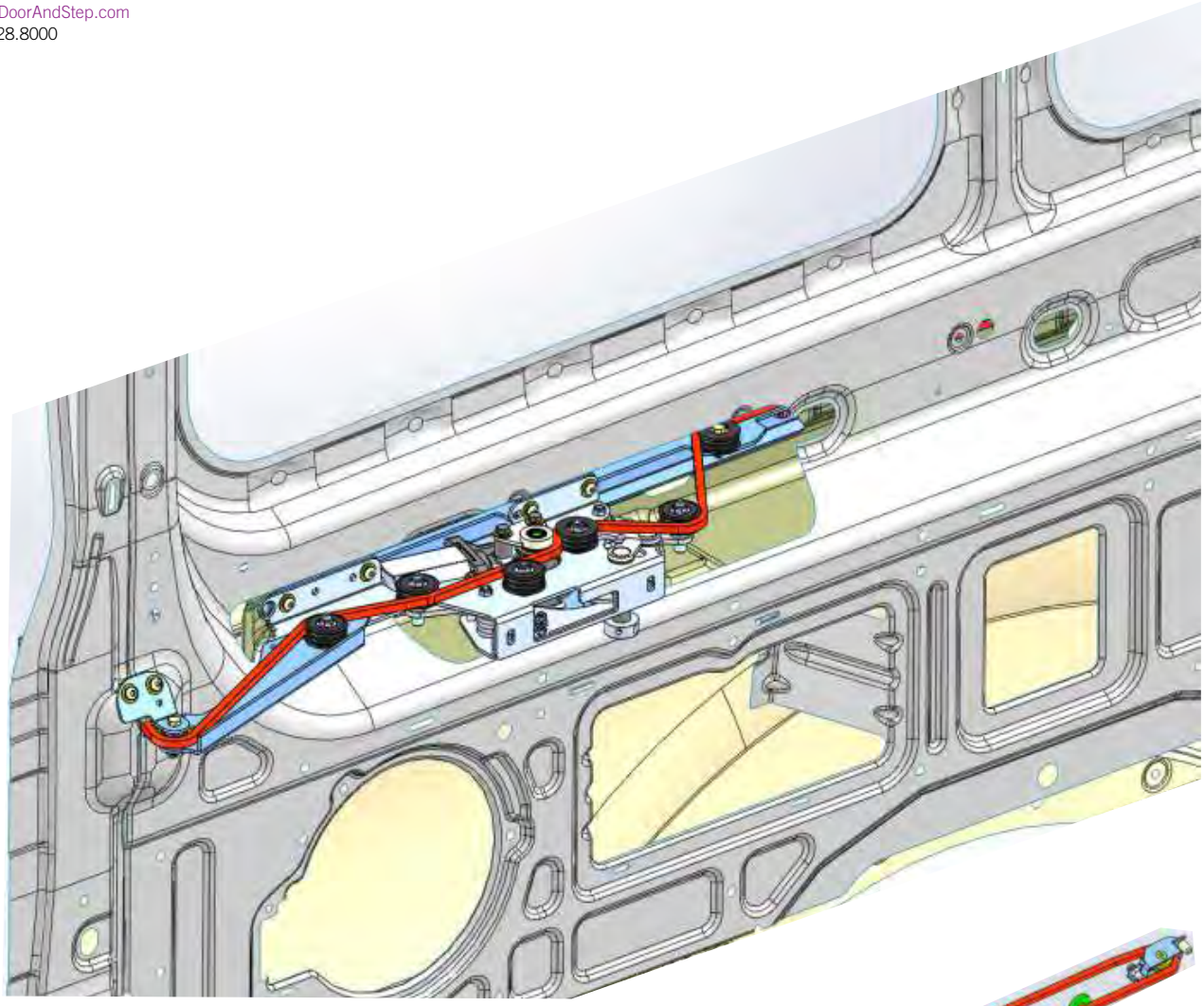


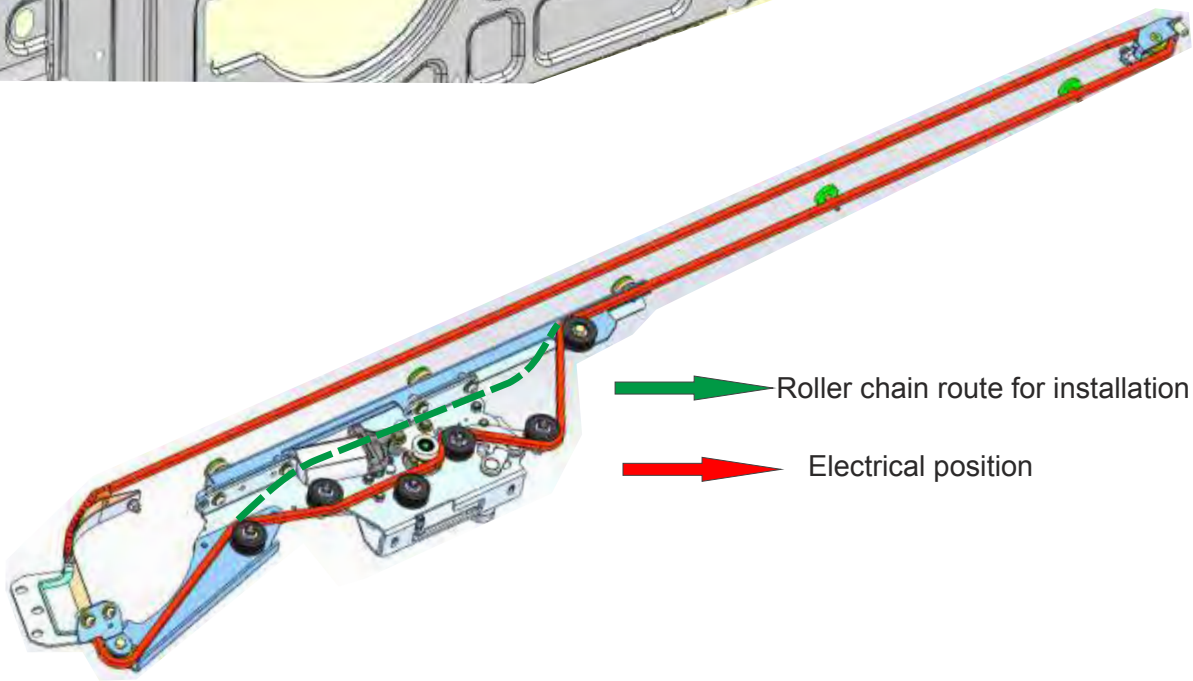


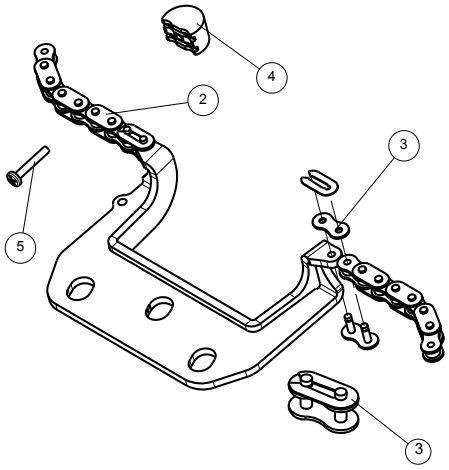


Template



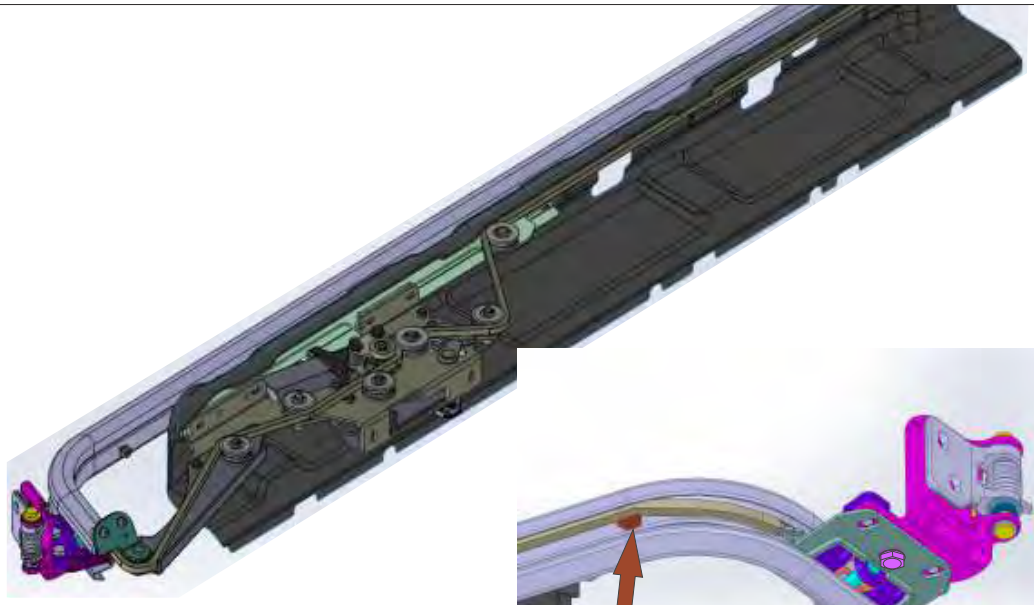


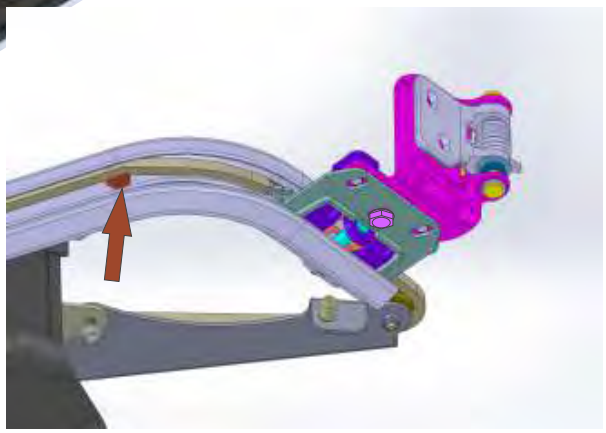

Roller chain route for installation
Electrical position

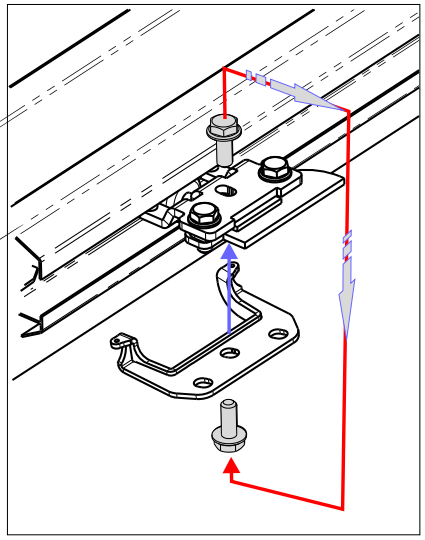


Roller Chain Kit
160-36-350

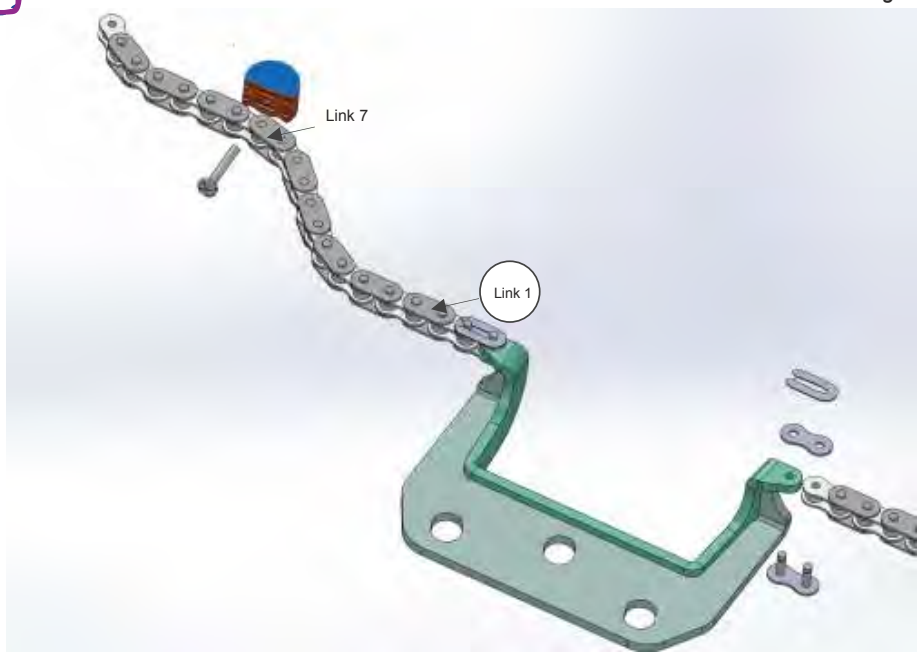
ITEM NO.	PART NUMBER	DESCRIPTION	Exploded/QTY.
1	111-36-320	Chain bracket	1
2	178-36-300	Roller chain B05 L=3088 mm(192 Links)	2
3	900-01-072	Chain connecting link B05	2
4	134-36-303	V363 Slider	1
5	647-03-012	Screw M3x12	1



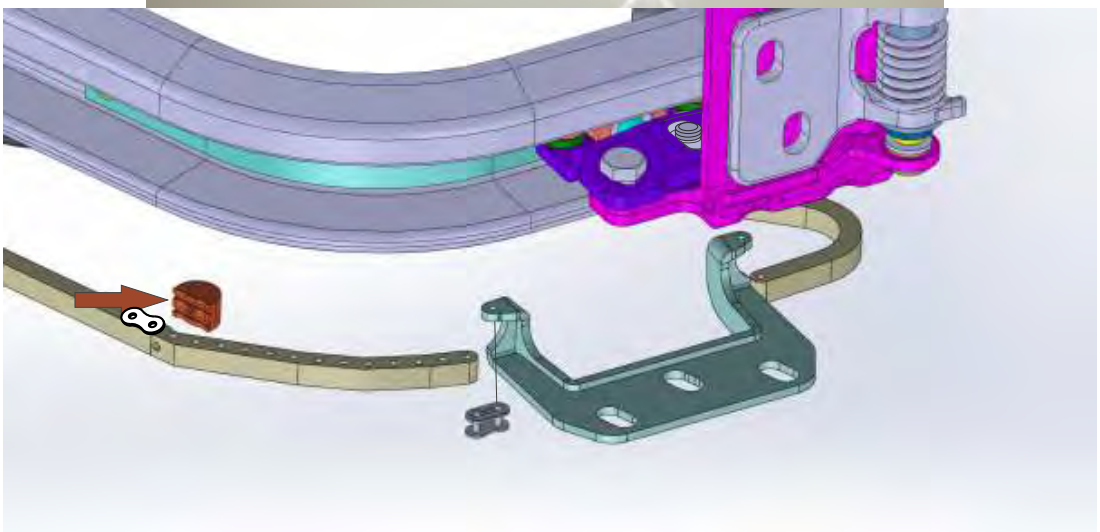


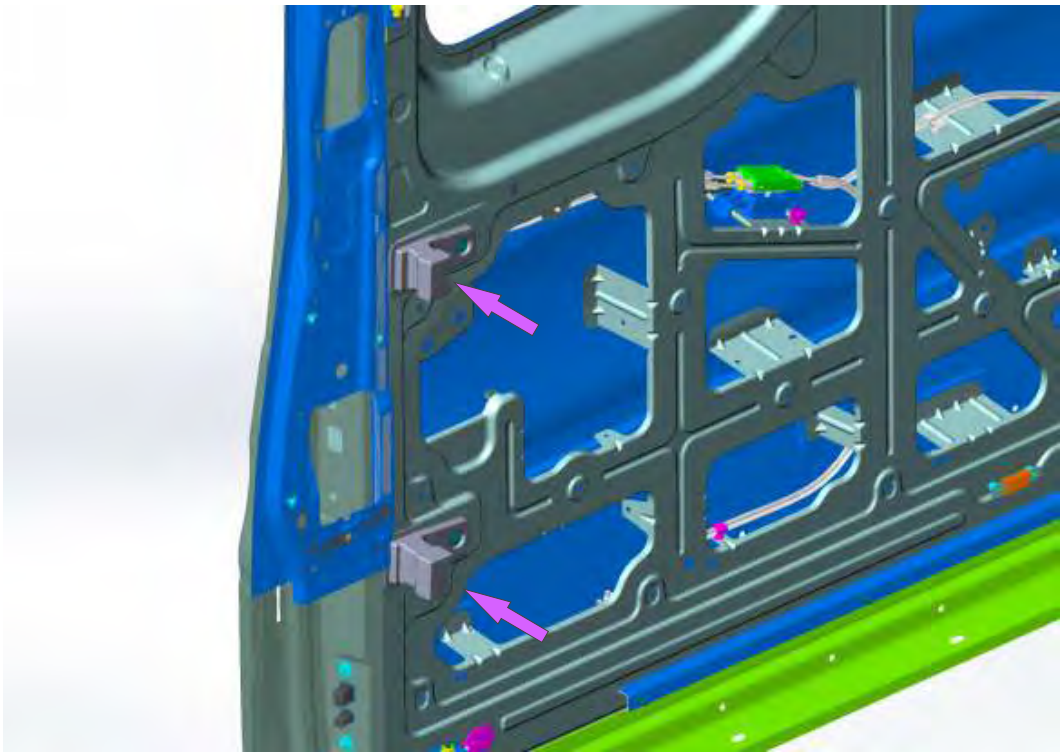


Page 9. Roller chain installation.

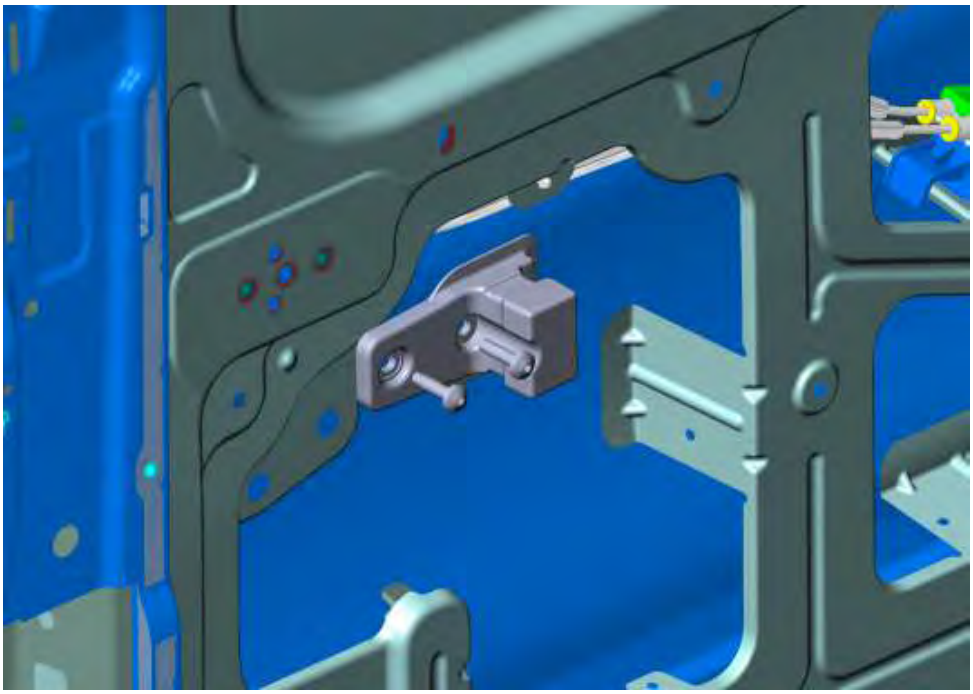

Link 7
Link 1

Link 7

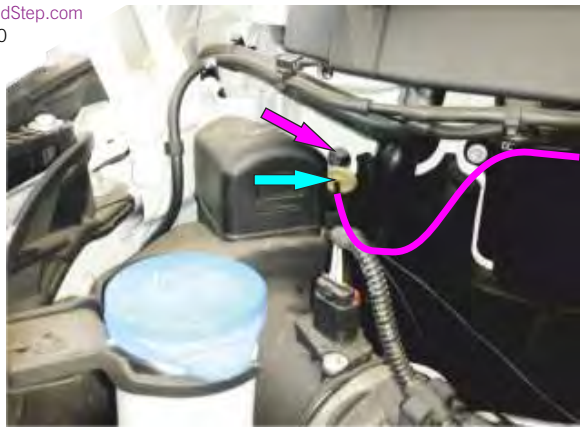


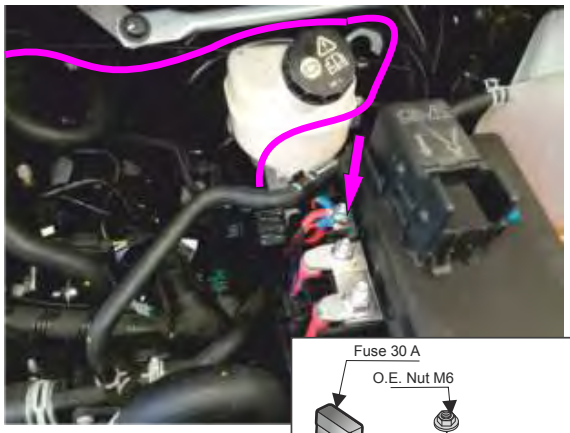


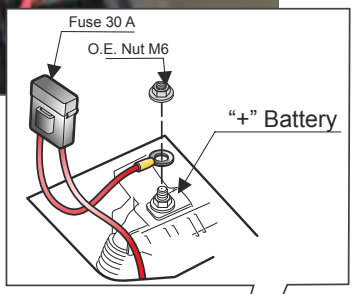
Two stoppers rotate 180 degrees

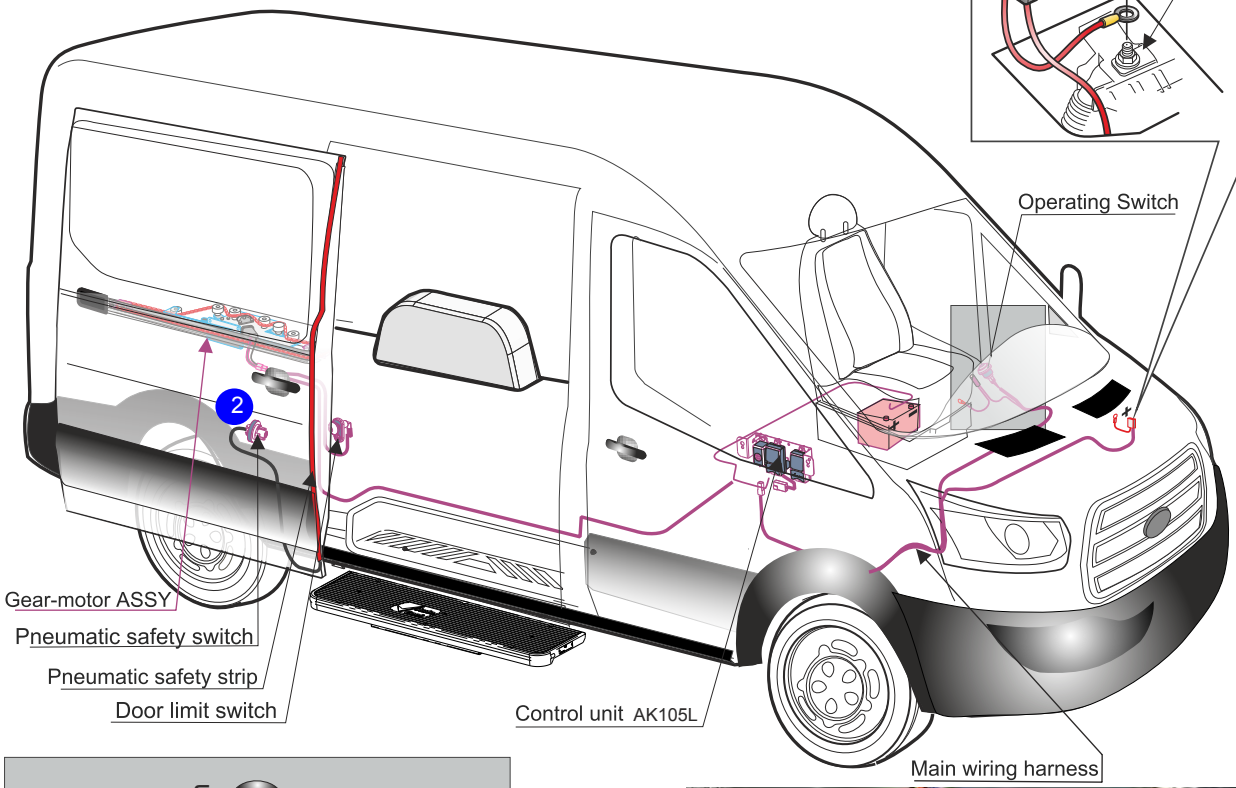


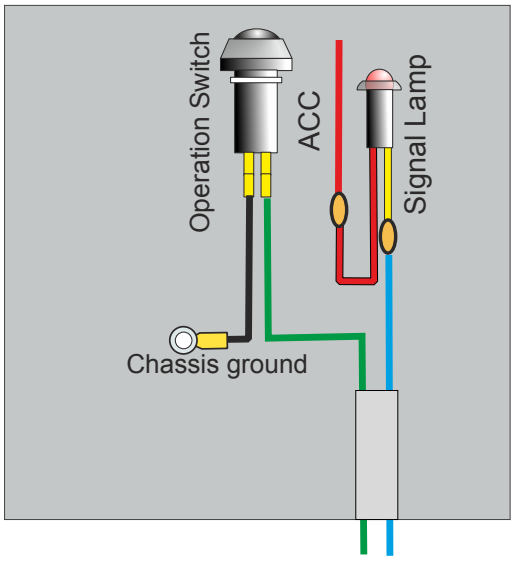
Plus wire installation







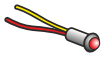




Electrical Accessories Kit

PN:160-36-300

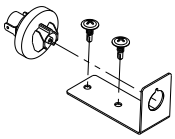
Operating Switch
PN;124-02-012-1



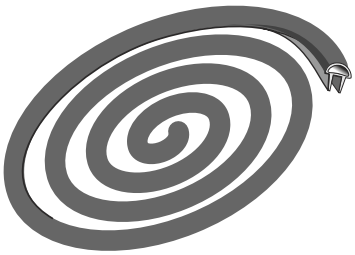
Signal Light
PN:124-10-069

Decal
PN:125-00-018

Door Limit Switch
PN:124-00-039



Pneumatic Safety Switch Assy
PN:160-10-042



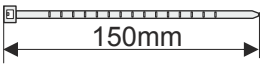
Pneumatic safety strip
PN:113-65067

Pneumatic Plastic Tube
PN:113-26063

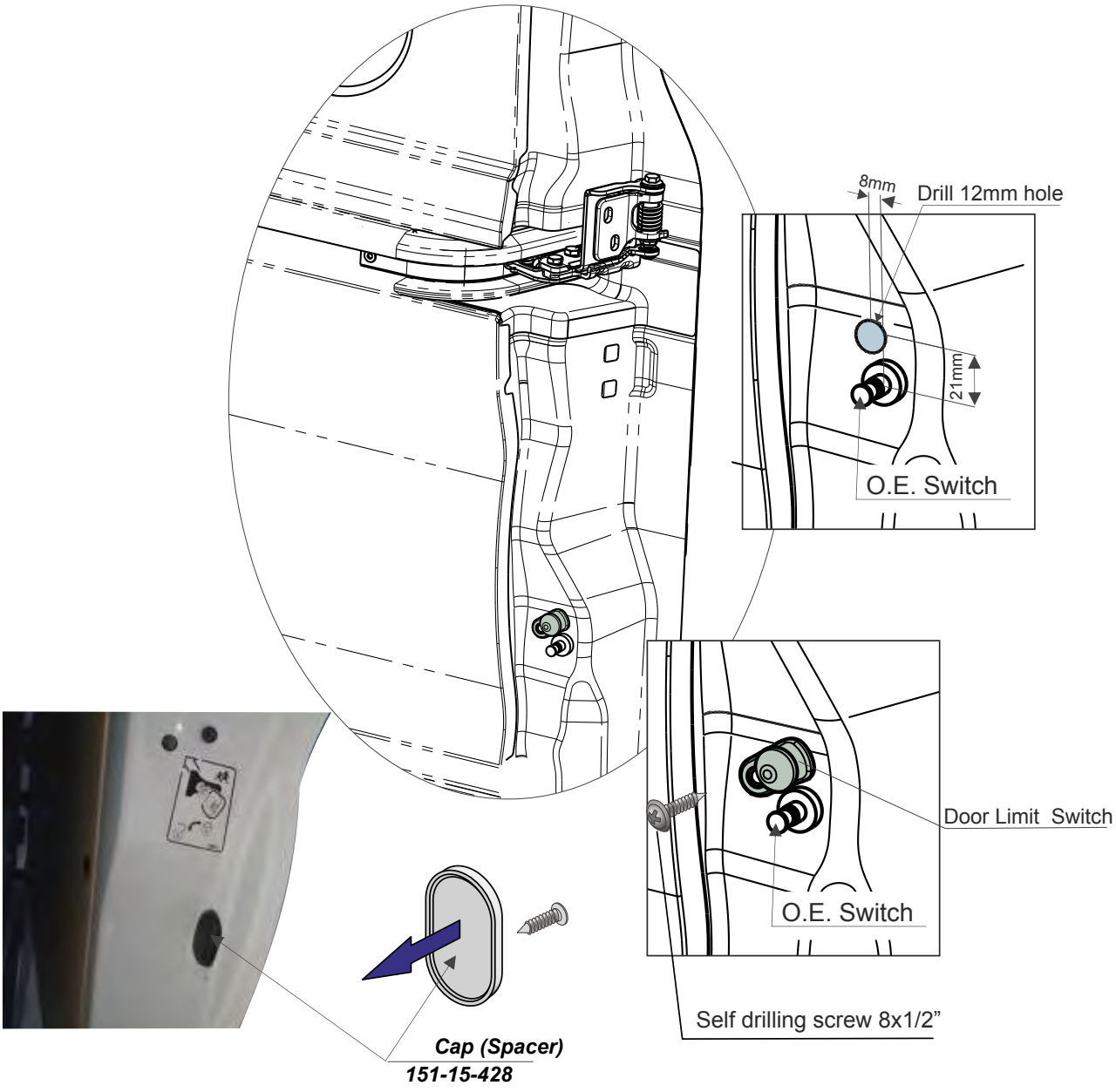
Rubber Tube
PN:113-06-067

Fast Glue
PN:144-30-007

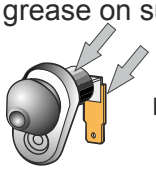
Cable strap
PN:125-10-016



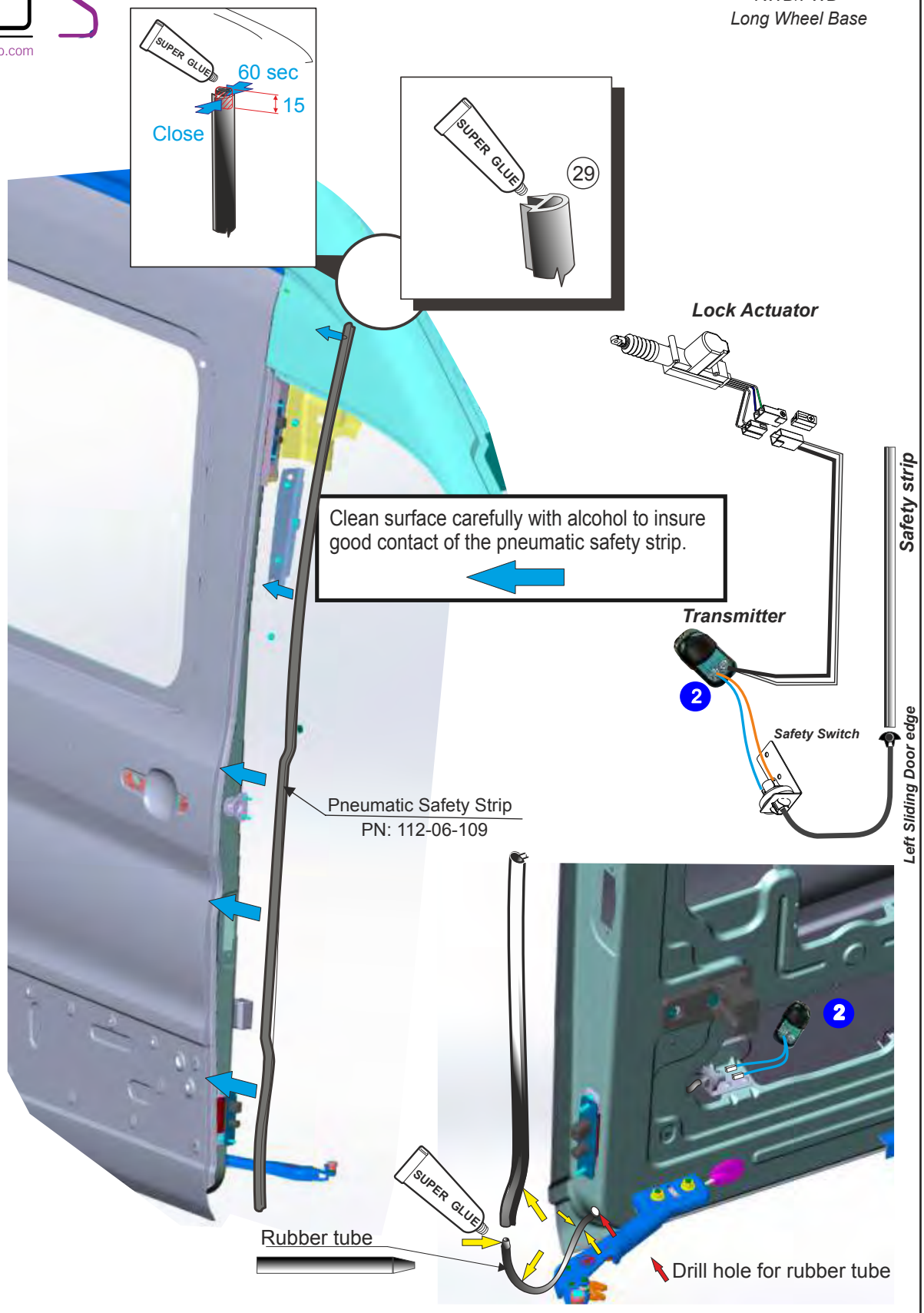
Cable strap
PN:125-10-014

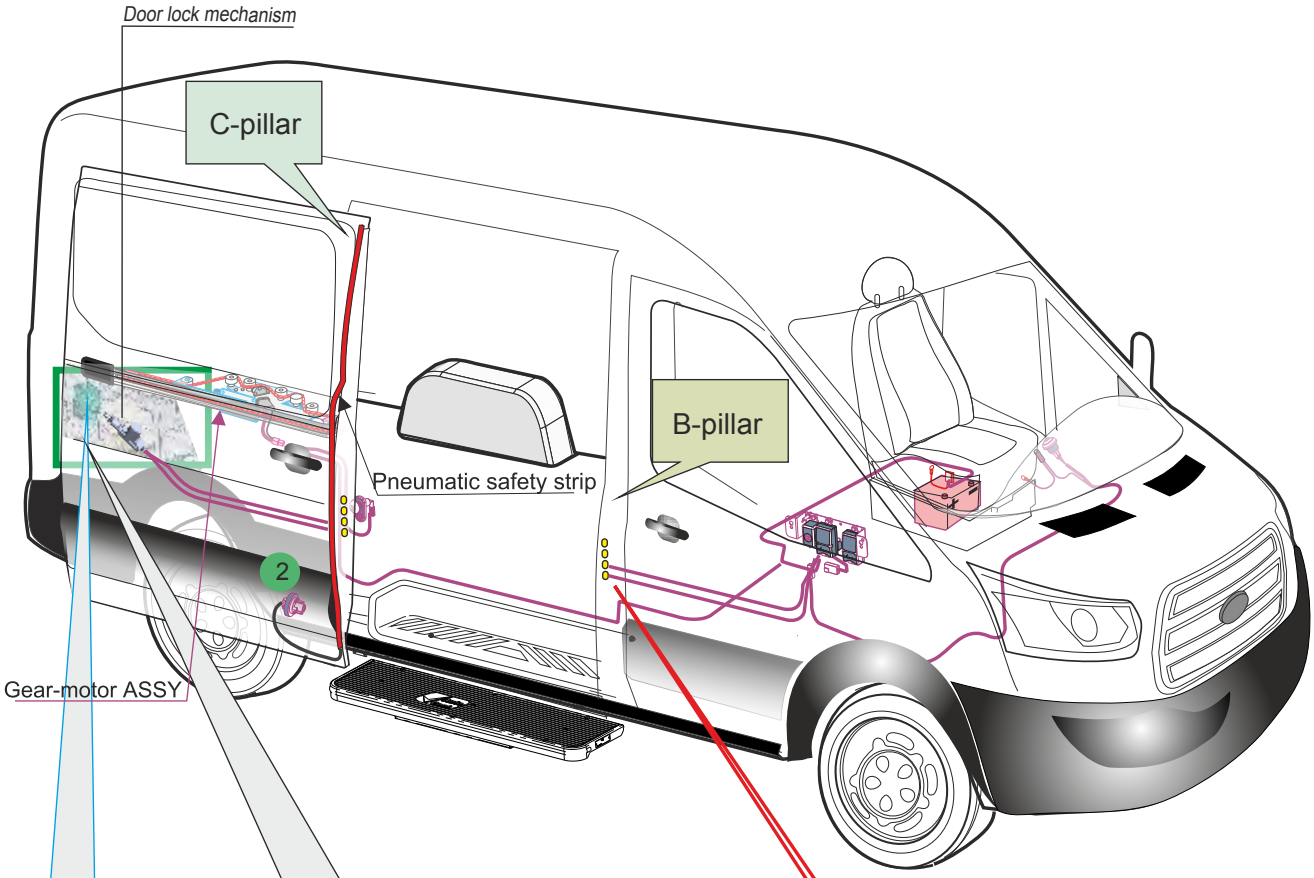


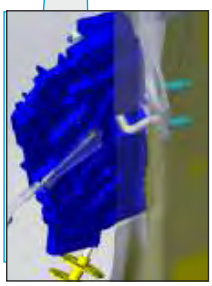
Apply grease on surface of switch



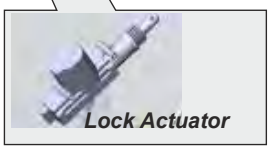
Door Limit Switch
124-00-039

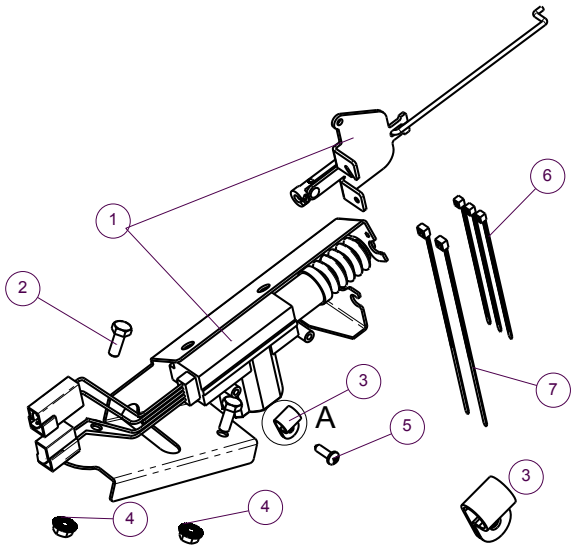

SUPER GLUE
60 sec
15
Close
SUPER GLUE
29
Lock Actuator
Clean surface carefully with alcohol to insure good contact of the pneumatic safety strip.
Transmitter
2
Safety strip
Safety Switch
Left Sliding Door edge
Pneumatic Safety Strip
PN: 112-06-109
2
SUPER GLUE
Rubber tube
Drill hole for rubber tube





O.E. Door latch

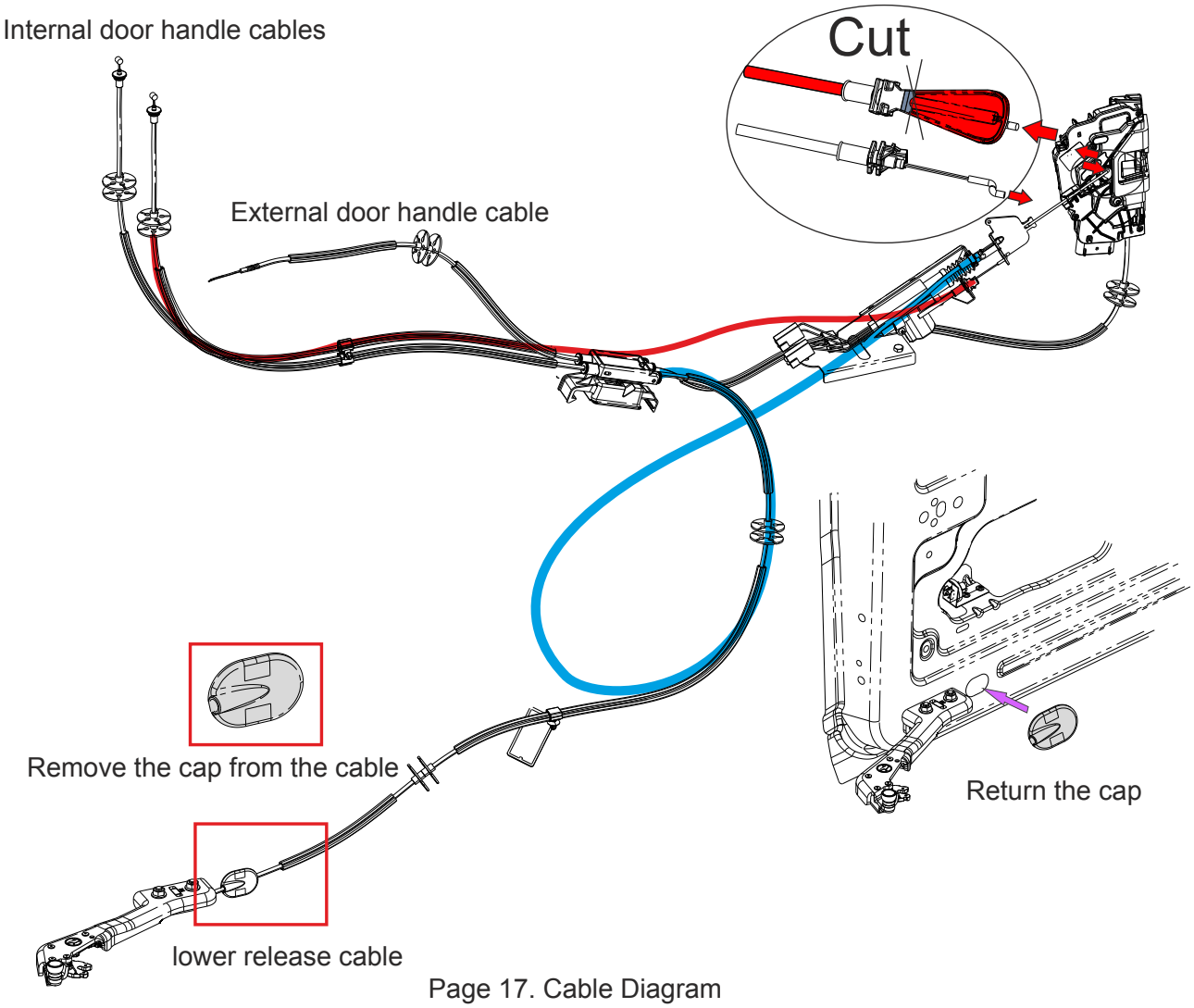


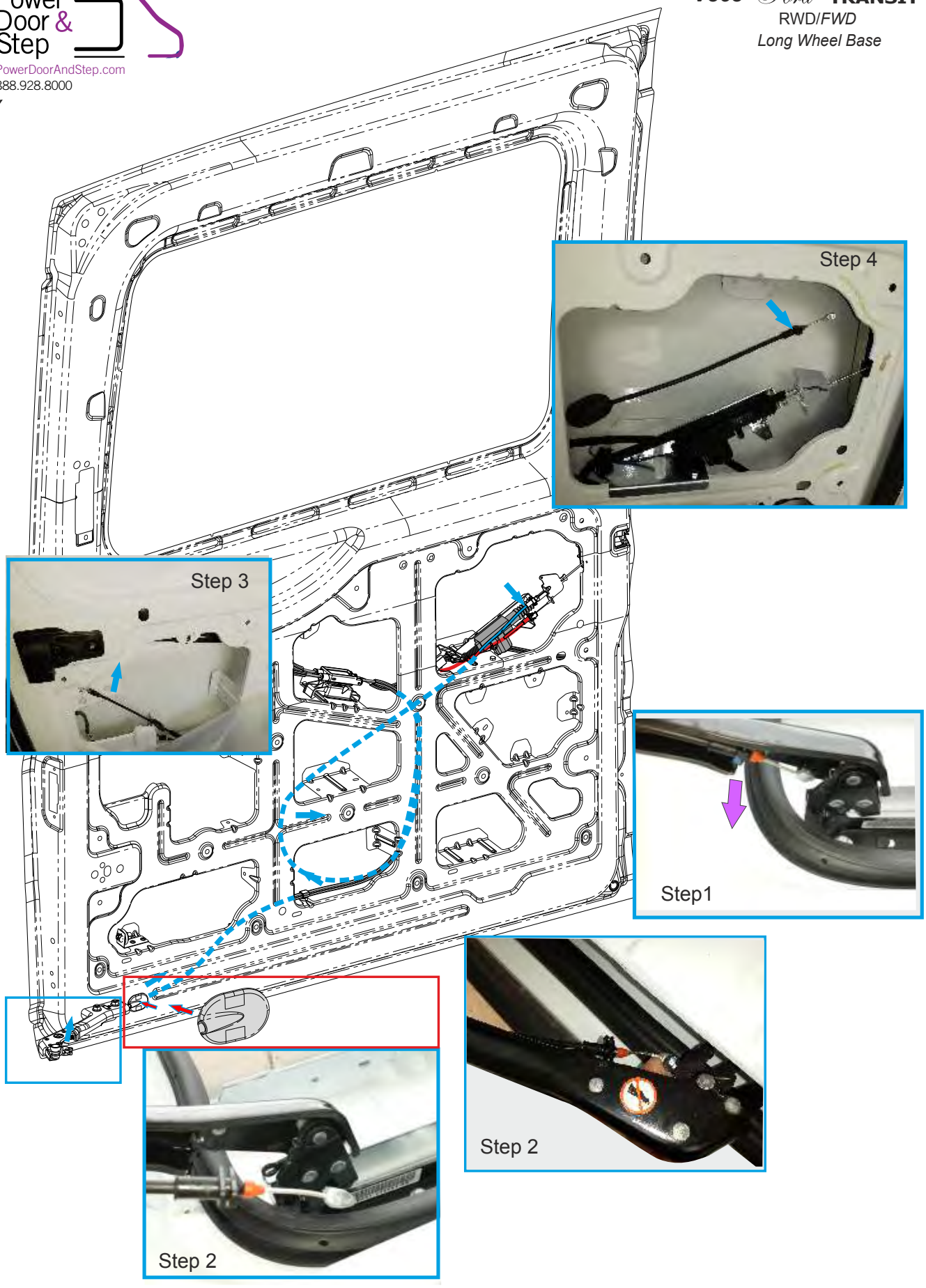


ASD V363 Ford Transit _Original Door latch mechanism & operation with handles

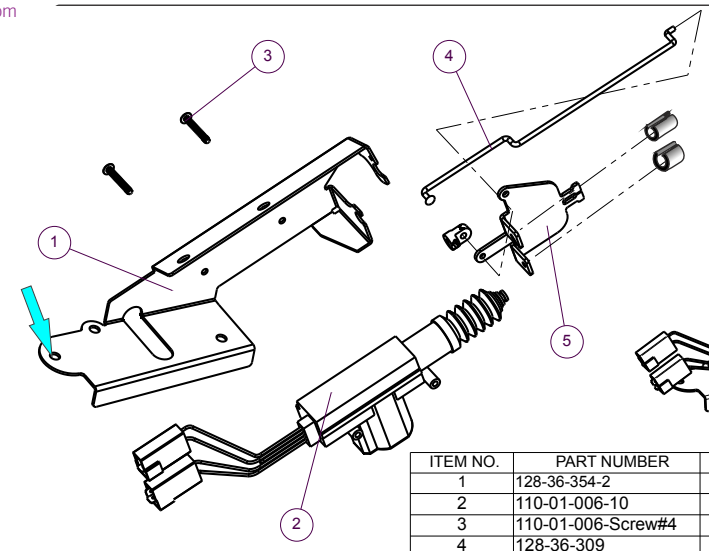
160-36-301

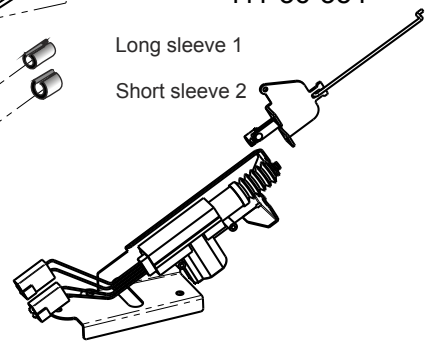
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	111-36-354	Lock Actuator bracket ASSY.	1
2	632-06-016	Hex cap screw M6x15	2
3	125-10-005	Plastic clamp UC-2 3/8"	1
4	601-06-006	Hex flange nut M6 DIN 6923	2
5	646-08-020	Phillips screw 6x3/8"	1
6	125-10-016	Cable strap 100mm	3
7	125-10-014	Cable strap 100mm	2



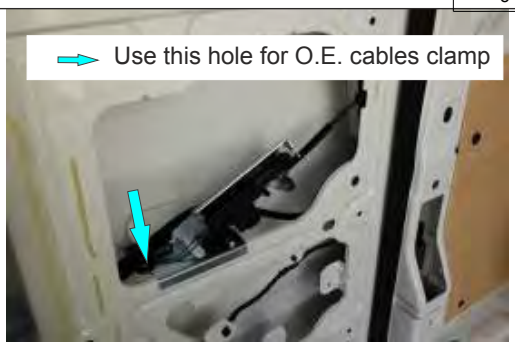

Step 4
Step 3
Step1
Step 2
Step 2

Lock Actuator ASSY.
111-36-354





ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	128-36-354-2	V363 Lock Actuator bracket	1
2	110-01-006-10	Lock Actuator ASSY	1
3	110-01-006-Screw#4		2
4	128-36-309	V363: V408 Lock Actuator arm	1
5	128-15-203	Cables adapter	1

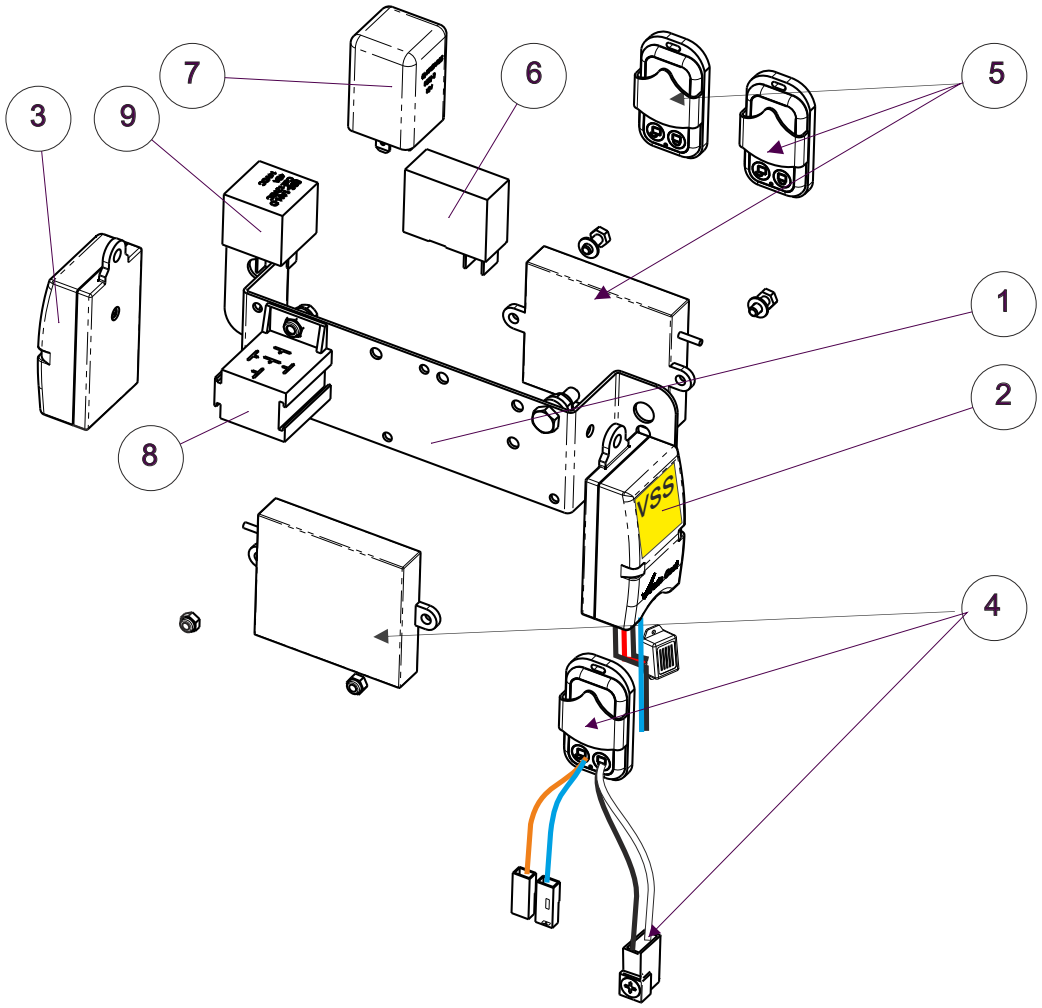


Short Sleeve

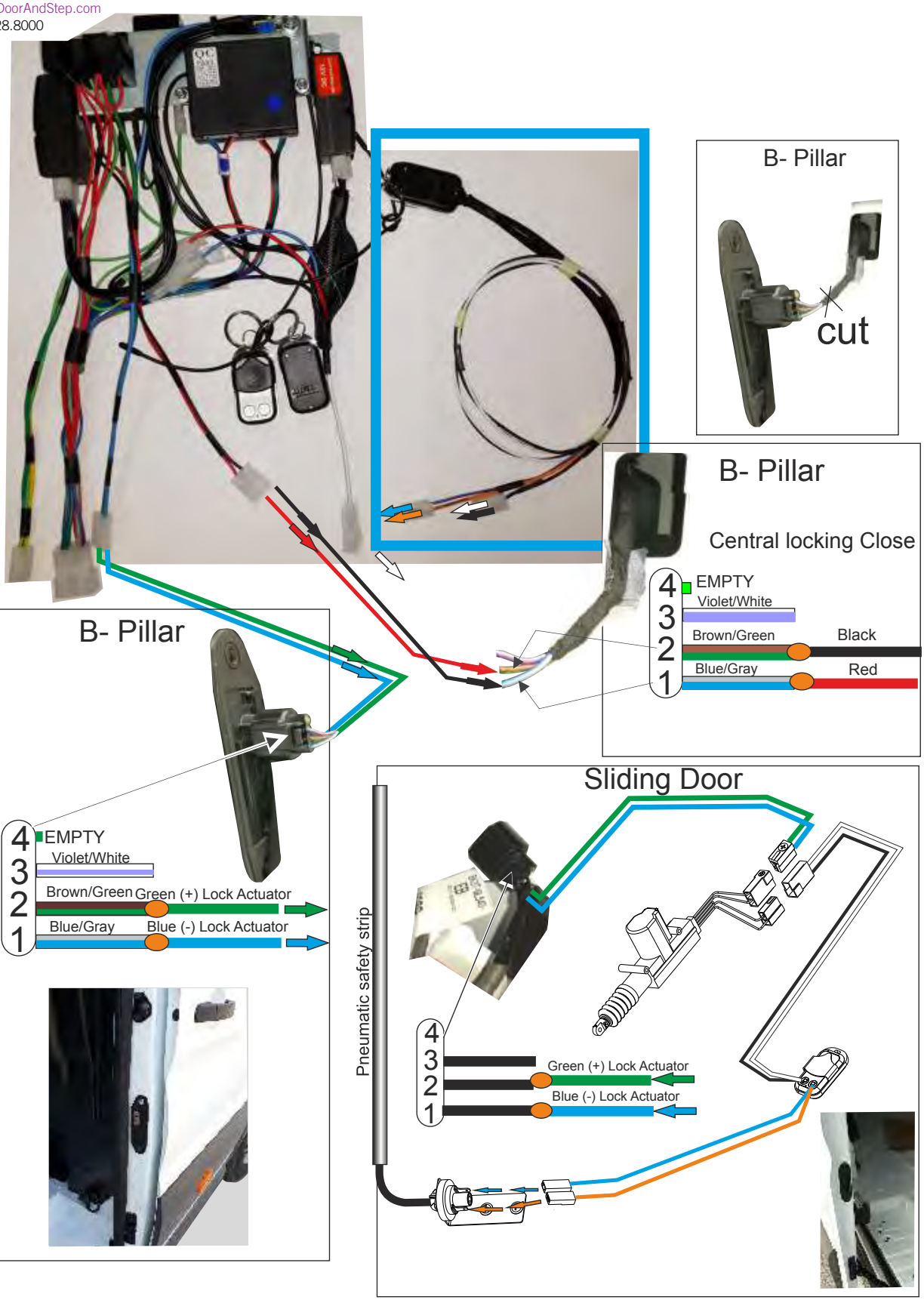
Long Sleeve

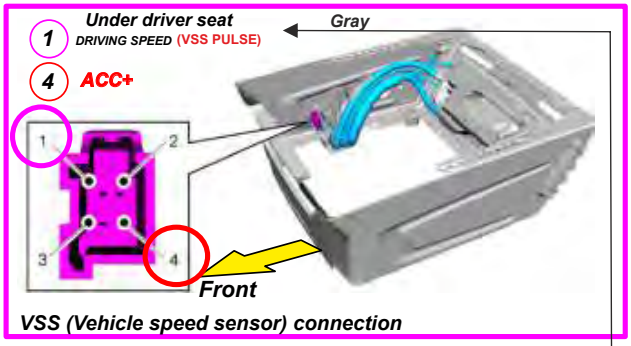
V363 Electric Harness Ford Transit

116-36-301-DL



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	128-17-116	Bracket	1
2	124-10-504	VSS detector	1
3	124-38332	Control unit AK-105L V1.913	1
4	124-02-006	LD-007-1 - Remote control kit	1
5	124-02-906	Remote Control Set	1
6	124-13-902	Latching relay 12v ASSY	1
7	124-00-032	Buzzer 12v	1
8	124-10-052	Socket terminal relay	1
9	R2A4-124	Relay	1


B- Pillar
cut
B- Pillar
Central locking Close
4
3
2
1
EMPTY
Violet/White
Brown/Green
Black
Blue/Gray
Red
B- Pillar
4
3
2
1
EMPTY
Violet/White
Brown/Green
Green (+) Lock Actuator
Blue/Gray
Blue (-) Lock Actuator
Sliding Door
Pneumatic safety strip
4
3
2
1
Green (+) Lock Actuator
Blue (-) Lock Actuator



VSS (Vehicle speed sensor) connection

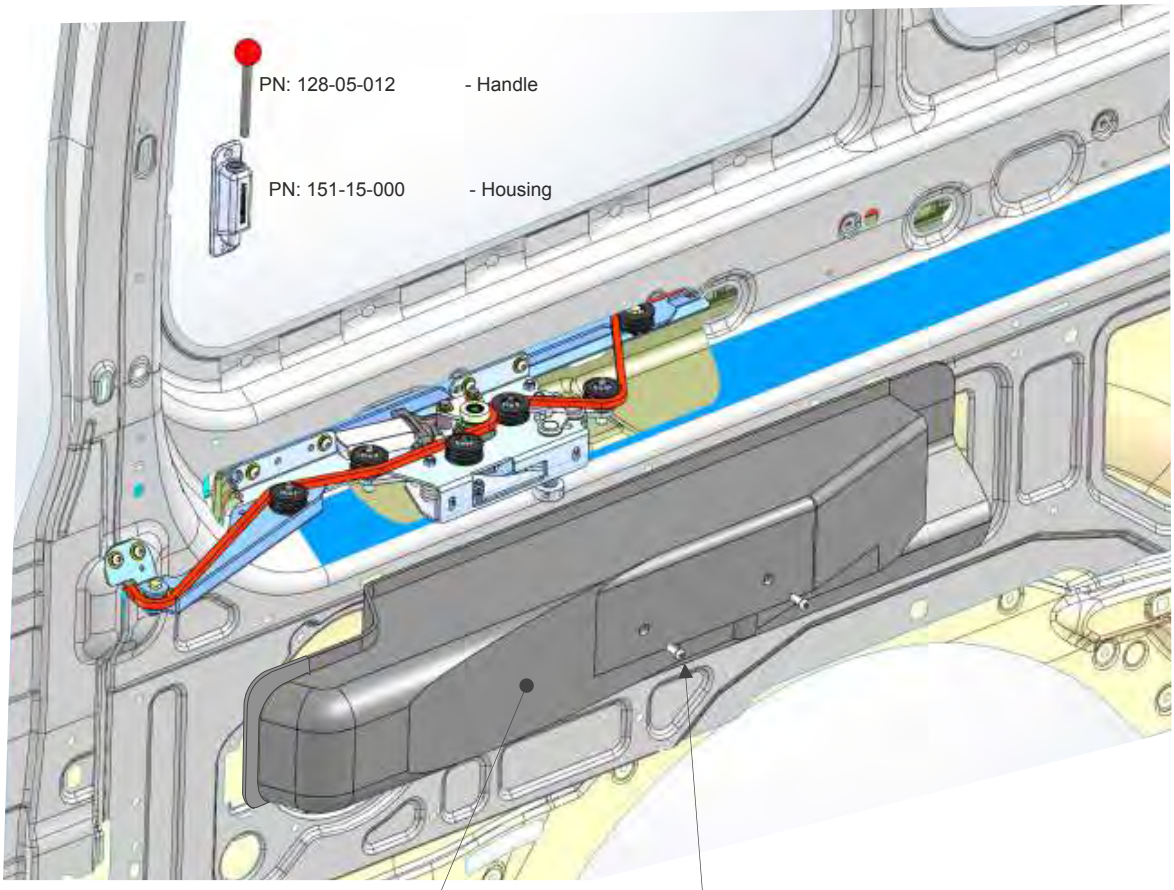
Sliding door
Pressure switch
Lock Actuator
Internal micro switch
Orange
Green
Blue
Black
White
Plug
Plug
Blue
Black
White
Green
Blue
2
4 3 2 1
O.E.Plug

Operating switch
Green
Black
White/Blue
Buzzer
Red
Gray
10 9 8 7 6
Con 5
5 4 3 2 1
VSS
Pulse Detector
Black
Black
Black
Black
D1
White
VSS
pin1
Connect to VSS

O.E.Plug (B-Pilar)
4 3 2 1
CUT
Green
Green
Door limit swith
Signal Lamp
+ACC
Buzzer
Black
MOTOR 12V DC
Green
Red
Yellow
Blue
Orange
AK-105L(250)
5 4 3 2 1
10 9 8 7 6
Green
Red 1.5 mm
Relay 12 V
85
87
86
30
OE wire brown/green from B-pilar plug
OE wire Blue/gray from B-pilar plug
Red
Black
Green
Green
86 85
87
30
latch Relay 12 V
Blue
Green
Red
Battery
12V
5A
Blue
Green
Remote Control
(receiver)
1
Black
Red
Red 1.5 mm
Blue
Green
Black
Red
2
Remote Control
(receiver)
Red
30A

Page 23. Wiring diagram

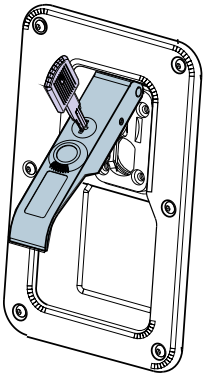
19.02.15


PN: 128-05-012 - Handle
PN: 151-15-000 - Housing
PN: 151-36-301-Cover
Phillips screw M6

ASD

Automatic Sliding Door External emergency door opening kit

PN: 111-03-013



Option

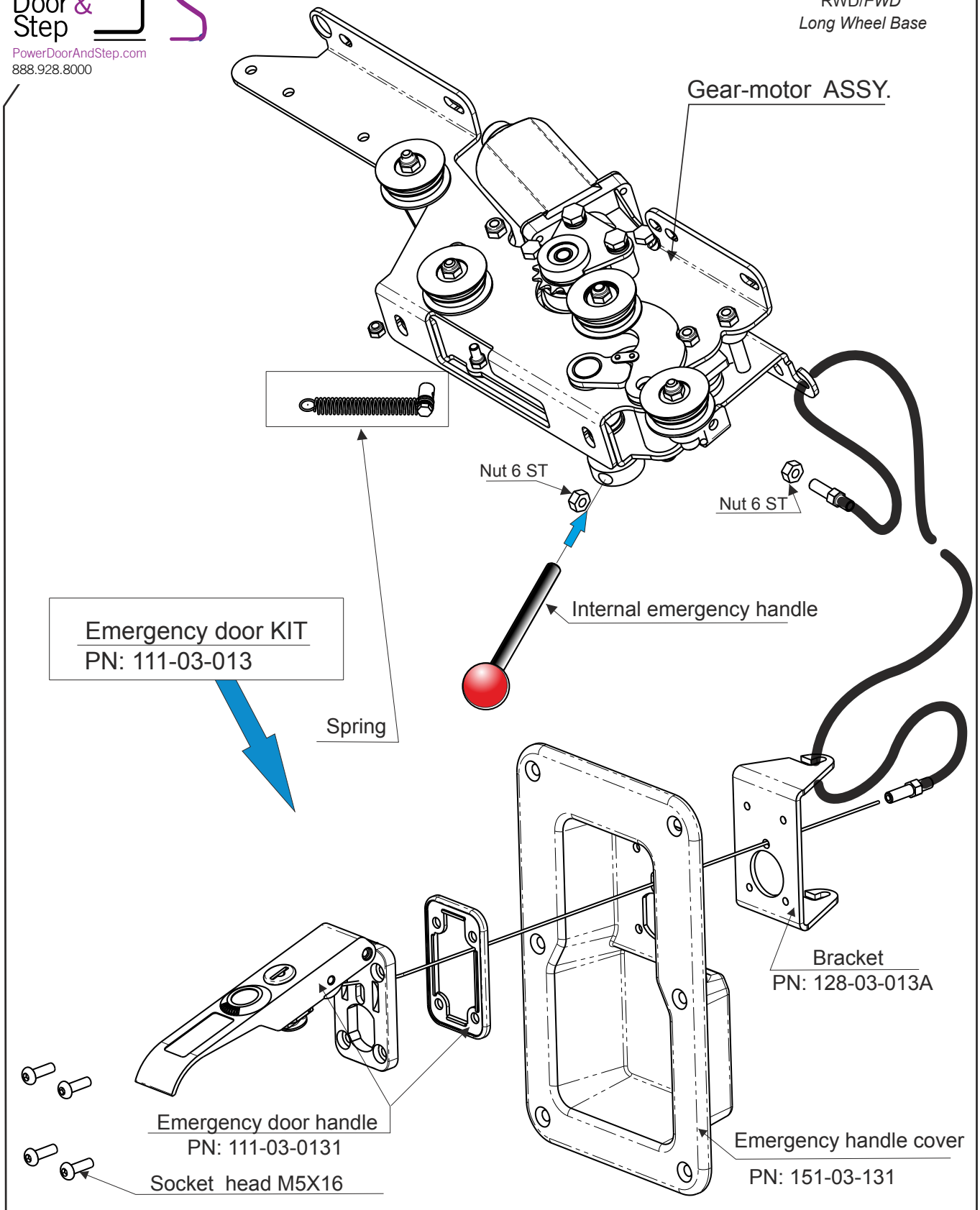
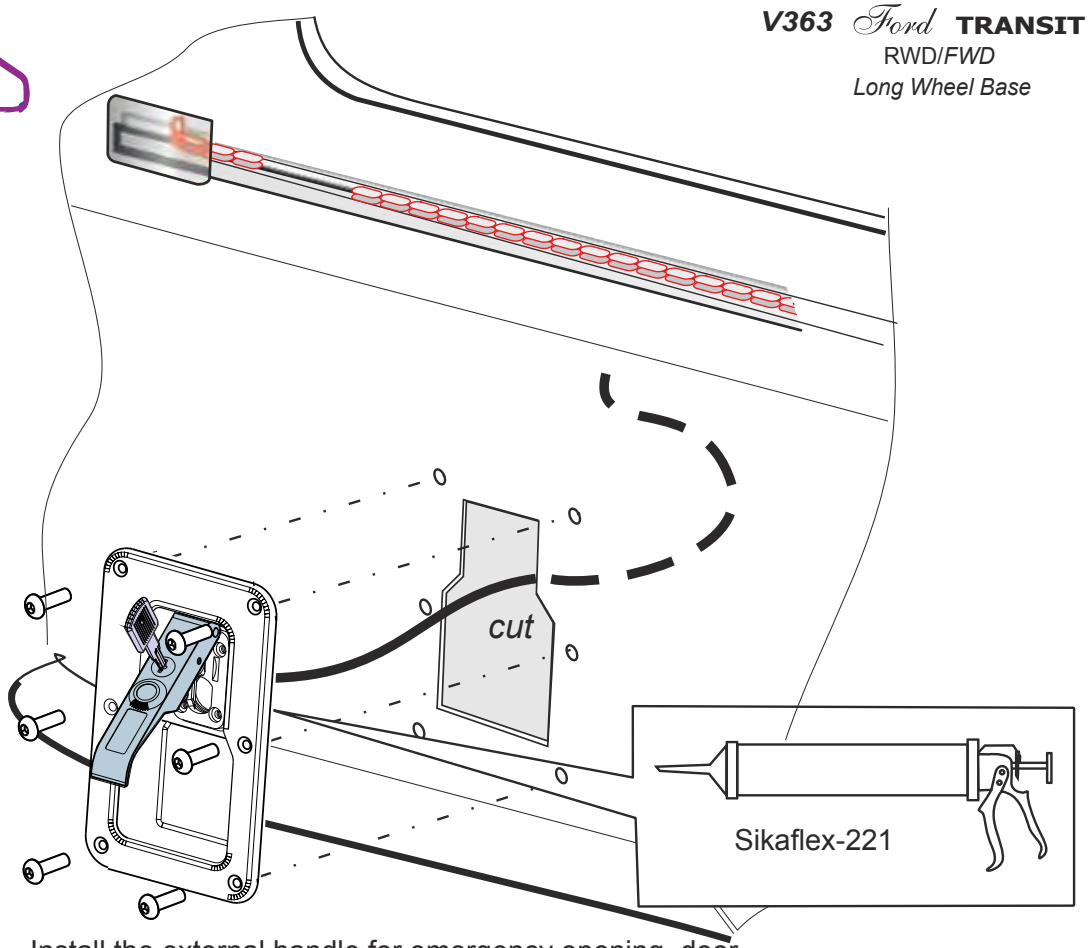
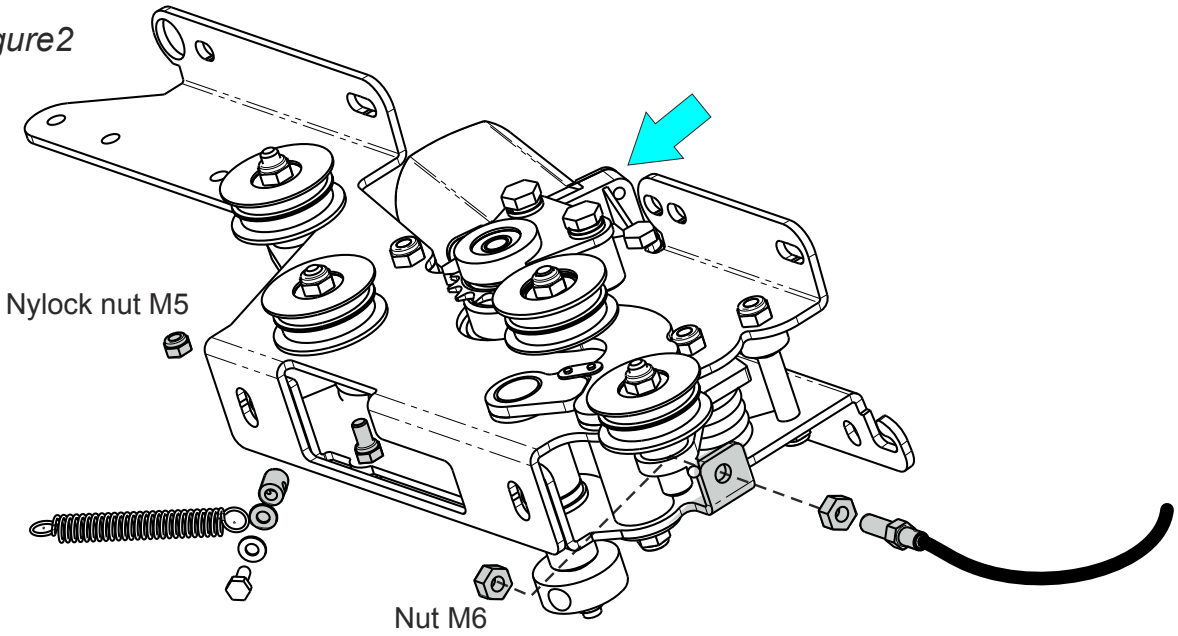

Gear-motor ASSY.
Nut 6 ST
Nut 6 ST
Internal emergency handle
Emergency door KIT
PN: 111-03-013
Spring
Bracket
PN: 128-03-013A
Emergency door handle
PN: 111-03-0131
Socket head M5X16
Emergency handle cover
PN: 151-03-131

Figure1

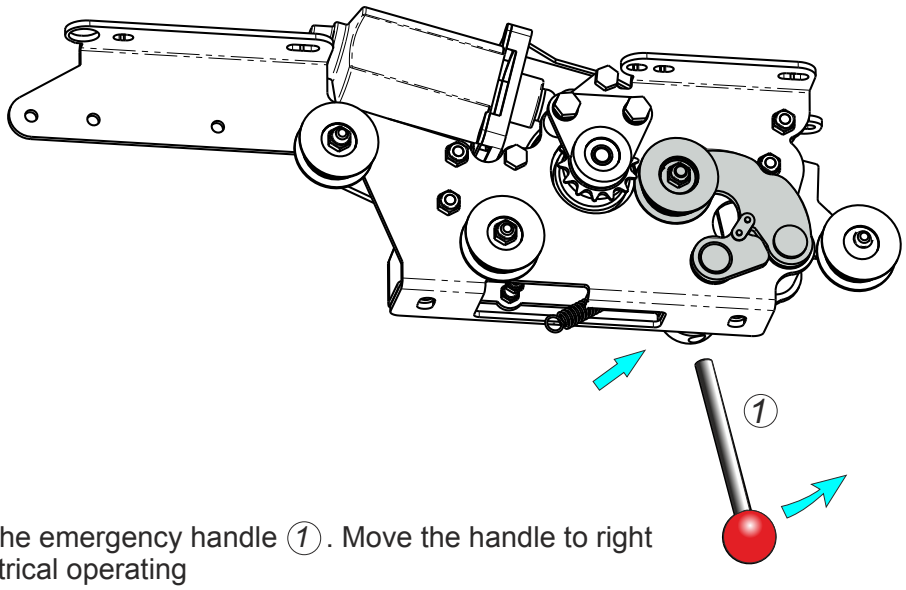


Install the external handle for emergency opening door

Figure2

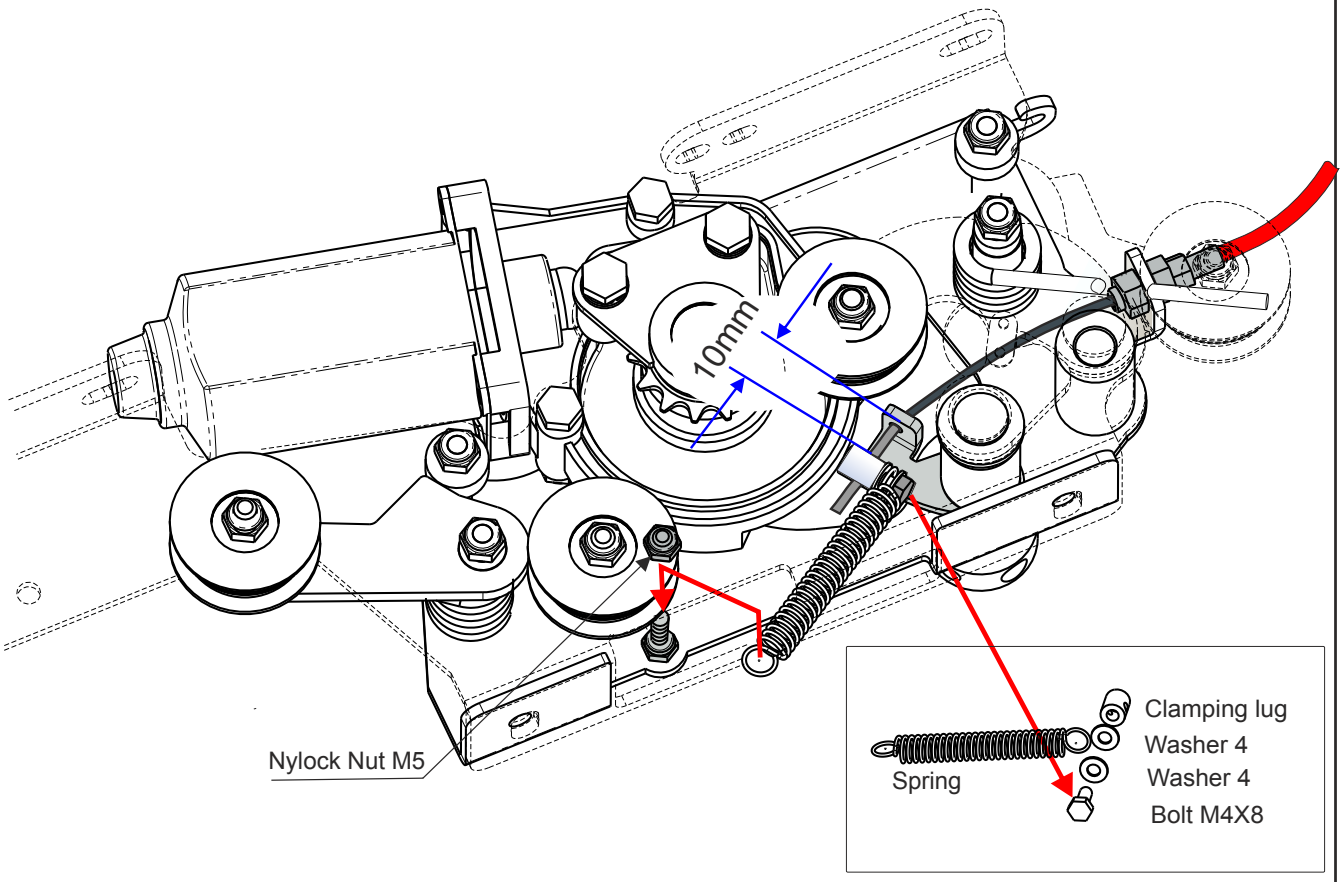


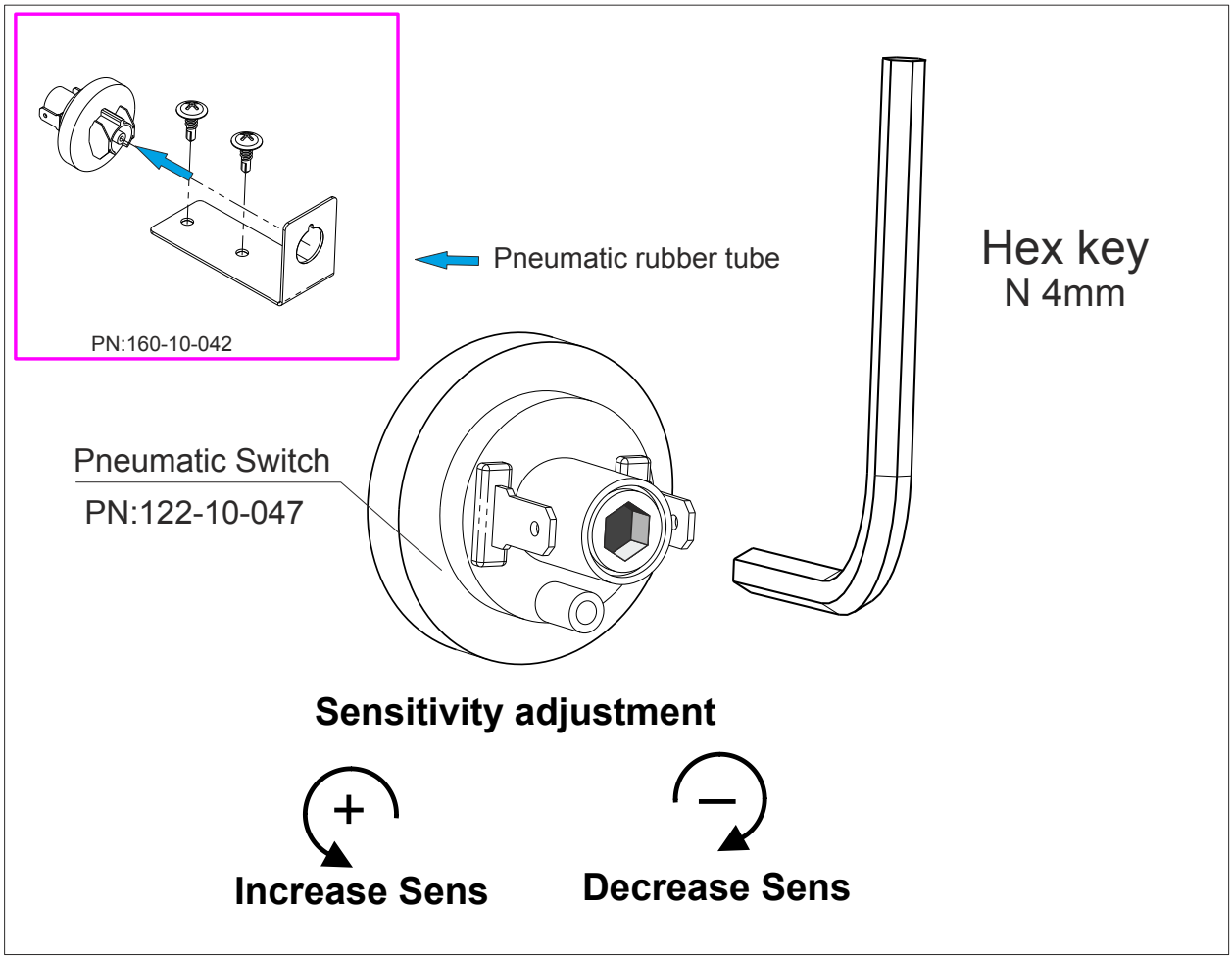
To install the cable:
Verify that the Internal emergency handle is on closed position.
Insert the cable into the hole (see figure 2) fasten nuts M6



Insert the emergency handle (1). Move the handle to right for electrical operating

Install the cable




PN:160-10-042
Pneumatic rubber tube
Hex key
N 4mm
Pneumatic Switch
PN:122-10-047
Sensitivity adjustment
+
Increase Sens
−
Decrease Sens

ASD: Basic Troubleshooting

1. Door does not function.
   - Check main fuse.
   - Check connections of power terminals to the control unit, motor and operating switch.
   - Check Control units AK-105L
   - Check motor.

2. Door does not operate upon commencing the closing mode or when reaching the fully closed position it reverses.
   - Check the safety pneumatic pressure tube; disconnect the plugs of pressure switch and close the door.
   - If the issue is not solved, try to regulate the sensitivity of the pressure switch.
   - Check safety switch.
   - Reset the system by extracting the fuse and returning it to its place.
   - Check control unit – AK105.

3. Door does not close completely.
   - Check voltage of battery, if low, start the engine.

4. Door does not open, although the electrical motor is engaged.
   - Check position of the locker unit, which annuls the OEM locking system of the door.

5. Door does not automatically reverse when encountering an obstruction during the closing mode.
   - Check safety pneumatic switch.
   - Check pressure tube & switch.
   - Check control unit.

6. Noise from the door's chain during opening and or closing modes.
   - Check installation and alignment of all wheel supports, front and rear, as well as the gear motor support.
   - Very loose chain may also jump over and cause damage to the sprocket's main motor.
   - Check chain tension and if needed shorten it by removing one or two " links".

7. Remote control unit does not function.
   - Check connection of power terminals.
   - Check battery of the key unit transmitter.

   If issue still persists, replace the remote control receiver and the two transmitters

8. If equipped with VSS, the door operates although the vehicle is in motion over 5Km/h.
   - Check connections to the VSS unit.
   - Check VSS unit.

9. Buzzer does not operate during the closing mode.
   - Check buzzer or replace it.

Please note:

The system performs automatic reset after the ASD has been disconnected from the power either when replacing the fuse or by disconnecting the Battery.
The system resets itself within two minutes. Please be patient.

Automatic Sliding Door user's Manual.

The Automatic Sliding Door system (ASD) manufactured by Auto Cool Ltd conforms with the requirements of the European regulations.
The ASD is approved by the German TUV in Munich, it complies with the **EEC DIRECTIVE 72/245EC and obtained the certificate of compliance No 2004/104/EC.**

Operation Instructions

The door is operated by a switch located on the dashboard:
To open–press the switch shortly, door opens to the end of its range.
To close - press the switch shortly, door closes and locks.
To change its direction while in motion - press the switch shortly, the door will change direction.
To control the opening range – continuous pressure on the control switch will set the door in motion upon its release, the door will stop.
Visual status indications – when the vehicle's main ignition switch is "on", the indicator control light is visible.
Dim light – the door is closed.
Bright light – the door is open.
Audio status indicators – independently of the vehicle's main switch – the vehicle's buzzer is always functioning whenever the door is in closing motion.

Safety measures

The system includes **safety features** to protect the passengers.

Closing – when encountering an obstruction, the controller automatically reverses the door direction to open all the way .
In addition, a pneumatic switch is attached to the front side of door pillar, which upon sensing pressure performs the same function and retracts immediately.
Opening - when encountering an obstruction, the controller stops the door.
ASD system is connected to the OE VSS device. The door operates only at speed of less than 5 km/h.

Emergency facility

The system has inside and outside (optional) emergency releasing handle.
Operating one of them will result in disconnecting the ASD mechanism device and the door will function manually immediately.

Please note:
The system performs automatic reset after the ASD has been disconnected from the power either when replacing the fuse or by disconnecting the Battery.
The system resets itself within two minutes. Please be patient.

Tools required for installation

ASD. AAD. STEP. ATG

Air Reciprocating Saw

Saw BLades

13mm Pneumatic Drill

Air Die Grinder

Hand holding battery-powered electric drill

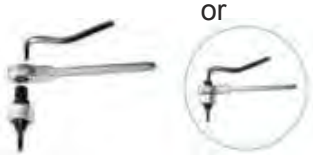
or

High speed threaded insert tool

or

Heavy duty hand tool for field and low volume production use

or



Small hand tool for
. prototype work and repairs

Soldering-iron

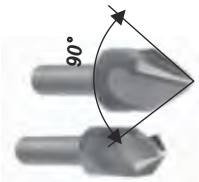
Masking Tape 50MM

Flashlight or drop light

Pencil or marker

Safety Glasses

Straight Flute HSS Step Drill
diameter 4-30mm



Drill Point Countersinks

Straight Shank Twist Drill

diameter 4mm / 5mm / 6mm/ 6.5mm / 7mm / 9.5mm 12mm

T-Handle Set

Hand Files

Heavy Duty Snap Blade Knives

Wire Stripper/Crimper

Locking plier

Combination Wrench Set Metric

Plier Set

1/4" Drive Socket Set metric

Screwdriver Set